



PHILIPS SURVEYORS

BUILDING SURVEYORS, DESIGNERS & CONSULTANTS

Ref: 2595/24/POW

Surveyor: Philip Wiltshire
BSc (Hons) MRICS IMaPS

Date: July 2024

Rev: 1st Issue

**SPECIFICATION OF WORKS
FOR
REPLACEMENT DECKING AND ASSOCIATED PARAPET
REBUILDING WORKS
AT
ARUNDEL TOWN HALL, MALTRAVERS STREET,
ARUNDEL, WEST SUSSEX. BN18 9AP.**



**Client – Arundel Town Council, Maltravers Street, Arundel, West
Sussex. BN18 9AP.**

PHILIPS SURVEYORS LLP

THE OLD COACH HOUSE

78 LOWER STREET

PULBOROUGH

WEST SUSSEX RH20 2AA

TEL 01798 873222

EMAIL info@philips-surveyors.co.uk



INTRODUCTION

Project: Replacement decking and associated parapet rebuilding works

Location: Arundel Town Hall, Maltravers Street, Arundel, West Sussex, BN18 9AP

Access: To be arranged with the Town Hall Manager.
Nichola Taylor 01903882954- Option 1 or
Email townhall@arundeltowncouncil.gov.uk

Contract

Administrator: Philips Surveyors LLP c/o Philip Wiltshire MRICS IMA PS
The Old Coach House
78 Lower Street
Pulborough
West Sussex RH20 2AZ

Telephone: (01798) 873222

Fax: (01798) 873444

Mobile: (07889) 922862

Contract: JCT Minor Works 2016 Edition

Contract Dates:	Tender Return:	As per tender letter
	Commencement:	28 th October 2024
	Completion:	12 th December 2024
	Contract Duration:	7 weeks

Note:

1. A suitably qualified full site foreman must be employed to manage and oversee the full duration of the project.
2. The works must be undertaken in one continuous process as per the programme.
3. The Contractor must employ the necessary labour, materials, plant and equipment to carry out the work in accordance with the overall programme to complete the work on time.
4. The dates are set in stone due to existing wedding bookings and no delay in the start date or completion date will be accepted. Failure to meet the completion date will result in liquidated damages been included for loss of wedding revenue at £3,000.00 per week.

The tender form, completed pricing schedule, tender summary and H & S questionnaire must all be returned to be classed as a valid tender.

Completed Tender envelope to be returned to :

**The Town Clerk, Arundel Town Hall, Maltravers Street, Arundel, West Sussex. BN18 9AP.
By noon on Friday 16th August 2024**

The sealed tender envelope must be clearly marked as **TENDER – DECKING and PARAPET** on the front with no markings to identify the tenderers name.

CONTENTS

Section A	General Preliminaries
Section B	Health and Safety - PCIP
Section C	Trade Preliminaries (NBS)
Section D	Particular Specification (Schedule of Works)
Section E	Tender Summary
 Appendix A	 Philips Surveyors LLP Information T01 Location & Block Plan T02 Proposed plan T03 Decking details Millboard specification 0202524 Millboard decking installation guide Millboard duospan installation guide
 Appendix B	 Planning Approval Notice Asbestos Management survey

SECTION A

General Preliminaries

SECTION A - PRELIMINARIES/ GENERAL CONDITIONS

A10 PROJECT PARTICULARS

110 THE PROJECT

Name: Arundel Town Hall – Replacement decking and associated parapet rebuilding works

Location: Arundel Town Hall, Maltravers Street, Arundel, West Sussex. BN18 9AP

115N TIMESCALE FOR COMPLETION OF THE WORK

The dates for the works are fixed due to the existing bookings that are already in place before and after the stipulated completion dates. These cannot be moved and the contractor must appreciate the requirement to complete by the proposed finish date of 12th December 2024.

Note: Examine drawings and all other relevant documents and information prior to tendering and raise all queries for resolution prior to submission of tenders.

The contractor must include for providing a full-time site foreman for the duration of the project.

The Contractor is completely responsible for taking all reasonable steps to understand the exact nature and scope of the work to be undertaken. Clarification should be sought for any items about which the Contractor has any doubt or considers have not been adequately covered in the tender documents. No claim will be accepted in respect of any items arising out of the Contractor's failure to understand the exact nature and scope of work to be undertaken.

The Contractor is to be fully responsible for the coordination and programming of all work, including those sections normally handled by specialists or public utilities. No claim will be entertained for want of information as to the means of access, the positions of other works, features on or around the site, the extent or nature of the work to be carried out, labour conditions and the conditions under which the work will be carried out.

120 EMPLOYER (CLIENT)

Arundel Town Council
Maltravers Street, Arundel, West Sussex. BN18 9AP.

130 PRINCIPAL CONTRACTOR (CDM)

The Main Contractor

140 CONTRACT ADMINISTRATOR (Herein after referred to as the 'CA')

Name: Philips Surveyors LLP c/o Philip Wiltshire MRICS RMaPS
Address: The Old Coach House, 78 Lower Street, Pulborough, West Sussex RH20 2AZ
Tel: 01798 873222
Mobile: 07889922862

150 PRINCIPAL DESIGNER

Name: Philips Surveyors LLP c/o Philip Wiltshire MRICS RMaPS
Address: The Old Coach House, 78 Lower Street, Pulborough, West Sussex RH20 2AZ
Tel: 01798 873222
Mobile: 07889922862

A11 TENDER AND CONTRACT DOCUMENTS

110 Existing DRAWINGS

Reference:- As appendix A

120 THE CONTRACT DRAWINGS

Description: As appendix A

160 PRECONSTRUCTION HEALTH & SAFETY INFORMATION

Refer to: Specification Section B
Section A34

180 OTHER DOCUMENTS

Description: Does not apply

A12 THE SITE/EXISTING BUILDINGS

110 THE SITE

Address: Arundel Town Hall, Maltravers Street, Arundel, West Sussex BN18 9AP.

140 EXISTING MAINS/SERVICES

Description: Identify, protect, uphold and maintain any existing services, live drainage, ducts, water, electric and other mains services found during the carrying out of the Works. If any are damaged, reinstate them before leaving site. Be liable for and indemnify the Town Council against any expense, liability, loss, claim or proceedings provided always that the damage is due to any negligence, omission or default of the Contractor's workpeople or sub-contractors.

The existing mains and services, which are on site are to be ascertained by the contractor and it will be their responsibility to familiarise themselves with the extent, exact nature and location of these. Where possible the approximate existing services location will be shown in the documentation or in the Health & Safety Plan but it will be the Contractor's responsibility to check their correctness.

Where a fire alarm and/or security alarm system is in operation, the Contractor should allow for protection and maintaining these throughout the contract duration and to allow to altering or adapting to suit the section of works/phase.

160 SOILS & GROUND WATER

Report: Does not apply

170 SITE INVESTIGATION

Report: Not Applicable

180 HEALTH & SAFETY FILE

Availability: Not available.

200 ACCESS TO THE SITE

Access: Via Maltravers Street - vehicular access possible – refer to drawings.

210 PARKING

Restrictions: Space for maximum 3 vehicles within contractors compound in side car park

220 USE OF THE SITE

General: Do not use the site for any purpose other than carrying out the Works.

230 SURROUNDING LAND/BUILDING USES

Description: . Residential

240 HEALTH & SAFETY HAZARDS

General: See Section B – Pre Construction Information Plan.

250 SITE VISIT

Pre-tender: Ascertain the nature of the site, access thereto and all local conditions and restrictions likely to affect the execution of the Works. Arrangements for site visits for tendering purposes shall be made in advance, with the Town Hall Manager as per the front sheet of this specification.

A13 DESCRIPTION OF THE WORK

110 PREPARATORY WORK BY OTHERS

Description: Does not apply

120 THE WORKS

Description: The removal and replacement of existing decking along with rebuilding and new damp proof courses to parapet walls and associated works

130 WORK BY OTHERS CONCURRENT WITH THE CONTRACT

Description: None identified at the time of tendering.

A20 JCT AGREEMENT FOR MINOR BUILDING WORKS

360 JCT MINOR WORKS BUILDING CONTRACT

The Contract: JCT Minor Works 2016; allow for all obligations, liabilities and services described therein against the headings below:

THE RECITALS

First

the Employer wishes to have the following work carried out (see A13/120) at (see A10/110) under the direction of the Architect/Contract Administrator referred to in Article 3;

Second

CONTRACTOR DESIGN PORTION

the Works include the design and construction of the electrical services ('the Contractor's Design Portion')

Third

the Employer has had the following documents prepared which show and describe the works to be done:

the drawings numbered/listed in (see A11/110) ('the contract Drawings')

a specification ('the Contract Specification')

~~Works Schedules~~

other documents showing or describing or otherwise stating his requirements for the design and construction of the Contractors Design Portion ('the Employer's Requirements')

which for identification have been signed or initialled by or on behalf of each Party; those documents together with this agreement, the Conditions and, if applicable, a Schedule of Rates as referred to in the Forth Recital (collectively 'the Contract Document') as annexed to this Agreement;

Fourth

the Contractor has supplied the Employer with a copy of the priced Contract Specification ~~or Work Schedules or with a Schedule of Rates,~~

Fifth

for the purposes of the Construction Industry under the Finance Act 2004, the status of the Employer is, as at the Base Date, the stated in the Contract Particulars;

Sixth

for the purposes of the Construction (design and Management) Regulations 2015 (the 'CDM Regulations') the status of the project that comprises or includes the Works is stated in the Contract Particulars;

Seventh

where so stated in the Contract Particulars, this Contract is supplemented by Framework Agreement identified in those particulars;

Eighth

whether any of Supplemental Provisions 1 to 6 apply id stated in the Contract Particulars;

THE ARTICLES

1

CONTRACTORS OBLIGATIONS

The Contractor shall carry out and complete the Works in accordance with the Contract Documents.

2

CONTRACT SUM

The Employer will pay the Contractor at the times and in the manner specified in the Conditions the VAT-exclusive sum of TBA ('the contract Sum')

3

ARCHITECT / CONTRACT ADMINISTRATOR

Contract Administrator: See A10/140

4

PRINCIPAL DESIGNER

PRINCIPAL DESIGNER: See A10/150

5

PRINCIPAL CONTRACTOR

Principal Contractor: See A10/130

6

ADJUDICATION

This clause **does** apply

7

ARBITRATION

This clause **does not** apply

8

LEGAL PROCEEDINGS

Subject to Article 6 and (where it applies) to Article 7, the English courts shall have jurisdiction over any dispute or difference between the Parties which arises out of or in connection with this contract

CONTRACT PARTICULARS

Fifth Recital & Schedule 2 (paragraphs 1.1, 1.2, 1.5, 1.6, 2.1 and 2.2)

Base date: 15th December 2022

Fifth Recital & clause 4.2

CIS: The Employer IS NOT a Contractor under the CIS.

Sixth Recital

CDM Regulations: The CDM regulations WILL apply.

Seventh Recital

Supplemental Framework Agreement: Does not apply

Eighth Recital & Schedule 3

Supplemental Provisions:

Collaborative Working	–	Applies
Health & Safety	–	Applies
Cost Savings & Improvements	–	Applies
Sustainable & Environmental Provisions	–	Applies
Performance Indicators & Monitoring	–	Applies
Notification of Negotiations & Disputes	–	Applies
Contractor Nominee	–	TBC
Employer	–	Philips Surveyors LLP

Article 7 & Schedule 1

Arbitration – DOES NOT apply

Clause 1.1

CDM PLANNING PERIOD

3 weeks

Clause 2.3

DATE FOR COMMENCEMENT OF THE WORKS

28th October 2024

Clause 2.3

DATE FOR COMPLETION

12th December 2024

Clause 2.9

LIQUIDATED DAMAGES

At a rate of £3,000.00 per week

Clause 2.11

RECTIFICATION PERIOD

Period: 6 months from the date of Practical Completion

Clause 4.3

INTERIM PAYMENTS

Monthly

Clause 4.3

PAYMENTS DUE PRIOR TO PRACTICAL COMPLETION

97.5 %

Clause 4.3

PAYMENTS BECOMING DUE ON OR AFTER PRACTICAL COMPLETION

2.5 %

Clause 4.3 and 4.8

FLUCTUATIONS PROVISION

Not Applicable

Clause 4.3 and 4.8

PERCENTAGE ADDITION FOR SCHEDULE 2

N/A

Clause 4.5

PERCENTAGE OF THE TOTAL AMOUNT TO BE PAID TO THE CONTRACTOR

97.5 per cent

Clause 4.8.1

SUPPLY OF DOCUMENTATION

3 months from the date of Practical Completion

Clause 5.3

CONTRACTORS PUBLIC LIABILITY INSURANCE

Insurance cover (for any one occurrence or series of occurrences arising out of one event)

£10 million

Clauses 5.4A, 5.4B & 5.4C

INSURANCE OF THE WORKS - ALTERNATIVE PROVISIONS

~~5.4A – Works insurance by Contractor in Joint Names~~

~~5.4B – Works and existing structures insurance by Employer in Joint Names~~

5.4C – Existing structures insurance by Employer in own name

Clauses 5.4A & 5.4B

PERCENTAGE TO COVER PROFESSIONAL FEES

Addition: 18 per cent

Clause 5.4C

INSURANCE ARRANGEMENTS

Alternative provisions

Clause 7.2

ADJUDICATION

The Adjudicator is: Royal Institution of Chartered Surveyors

Nominator of Adjudicator: President / Vice president or Chairman or Vice Chairman of the RICS

Schedule 1 (Paragraph 2.1)

ARBITRATION

Appointer of Arbitrator (and of any replacement): Does not apply

A30 TENDERING / SUBLETTING / SUPPLY**MAIN CONTRACT TENDERING**

- 110 SCOPE
General: These conditions are supplementary to those stated in the invitation to tender and the form of tender.
- 145 TENDERING PROCEDURE
General: Tendering shall be in accordance with the 2012 JCT Tendering Practice Note:
Arithmetical errors: **Alternative 2**
Amendments: Any variations or alternative proposal to the chosen standard or specification **must** be listed.
- 160 EXCLUSIONS
Inability to tender: Immediately inform in any parts of the works as defined in the tender documents cannot be tendered.
Relevant parts: Define those parts, stating reasons for the inability to tender.
- 170 ACCEPTANCE OF THE TENDER
Acceptance: No guarantee is offered that any tender will be recommended for acceptance or be accepted, or that reasons for non-acceptance will be given.
Costs: No liability is accepted for any cost incurred in the preparation of any tender.
- 180 CDM PLANNING PERIOD
Period: Minimum TWO weeks ending on DATE OF COMMENCEMENT
- 190N PERIOD OF VALIDITY:
Period: Tenders must remain open for not less than thirteen weeks from the date of submission (unless previously withdrawn).

PRICING / SUBMISSION OF DOCUMENTS

- 210 PRELIMINARIES IN THE SPECIFICATION
Measurement rules: Preliminaries / General Conditions ~~must not be relied on as having been / have /~~ have not been prepared in accordance with SMM7 or the NRM.
- 220 PRICING OF PRELIMINARIES
Charges: If the Contractor requires interim payments to include fixed and time related charges for specific items in the Preliminaries those charges must be clearly shown against the items.
- 250 PRICED DOCUMENTS
Alterations: Do not alter or qualify the priced documents within the CA's written consent. Tenders containing unauthorised alterations or qualifications may be rejected.
Measurements: Where not stated ascertain from the drawings.
Deemed included: Costs relating to items, which are not priced, will be deemed to have been included elsewhere in the tender.
Submit: **With tender**
- 310 TENDER
General: Tenders must include for all work shown or described in the tender documents (drawings & specification) as a whole or clearly apparent as being necessary for the complete and proper execution of the Works.
- 465N THE FORM OF TENDER
Must be submitted with the tender.
- 480 PROGRAMME
Programme of work: Prepare a summary showing the sequence and timing of the principal parts of the Works and periods for planning and design. Itemise any work, which is excluded.
Submit: **Within five working days of request**

530 SUBSTITUTE PRODUCTS

Details: If products of different manufacture to those specified are proposed, submit details during or with the tender giving reasons for each proposed substitution. Substitutions which have not been notified at tender stage may not be considered.

Compliance: Substitution's accepted subject to verification requirements of clause A31/200.

550 HEALTH AND SAFETY INFORMATION

Content: Describe the organisation and resources to safeguard the health and safety of operatives, including those of subcontractors, and of any person whom the Works may affect.

Include: A copy of the Contractor's health and safety policy document, including risk assessment procedures.
Accident and sickness records for the past five years.
Records of previous Health and Safety Executive enforcement action.
Records of training and training policy.
The number and type of staff responsible for health and safety on this project with details of their qualifications and duties.

Submit: **Within five working days of request.**

570 OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

Content: Submit the following information within one week of request:
Method statements on how risks from hazards identified in the pre-tender health and safety plan and other hazards identified by the Contractor will be addressed.
Details of the management structure and responsibilities.
Arrangements for issuing health and safety directions.
Procedures for informing other contractors and employees of health and safety hazards.
Selection procedures for ensuring competency of other contractors, the self-employed and designers.
Procedures for communications between the project team, other contractors and site operatives.
Arrangements for cooperation and coordination between contractors.
Procedures for carrying out risk assessment and for managing and controlling the risk.
Emergency procedures including those for fire prevention and escape.
Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded.
Arrangements for welfare facilities.
Procedures for ensuring that all persons on site have received relevant health and safety information and training.
Arrangements for consulting with and taking the views of people on site.
Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance.
Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements.
Review procedures to obtain feedback.

Submit: **Within five working days of request.**

645 DOMESTIC SUBCONTRACTS

General: Comply with the Construction Industry Board 'Code Of Practice For The Selection Of Subcontractors'.

List: Provide details of all subcontractors and the work for which they will be responsible.

General: Contract Documents provide that certain work must be carried out by a person of the Contractor's choice selected from a list of not less than three persons given therein.

The selected person: Will become a subcontractor as provided for in the Contract Condition for Subletting.

Additions to lists: The Employer or Employer's representative may, but only with the consent of the Contractor which shall not be unreasonably withheld, add additional person(s) to the list at any time prior to the execution of a binding subcontract agreement.
The Contractor may, but only with consent, which will not be unreasonably withheld, add additional persons to the list and must, if requested, submit (in an approved form) evidence of the suitability of such additional person(s). Wherever possible, submissions for addition of person(s) must be made, and consent obtained, before return of the tender. When any submission for addition of person(s) is made with the

	tender the consequences, if any, to the tender price compared to the use of the listed persons are to be made clear or the tender will be treated as qualified.
Shortage of names:	If at any time prior to execution of a binding subcontract agreement less than three persons named in the list (including any persons added as provided above) are able and willing to carry out the relevant work, give notice without delay. The Employer will then forthwith add the names of other persons as provided above so that the list comprises not less than three such persons, or confirm that no names will be added. If the Employer fails to do either within one week of the Contractor's notification the Contractor, who may subcontract in accordance with the Contract, must carry out the work.
Agreement:	Before the start of work to which the list relates enter into a binding subcontract agreement and confirm that this has been done, giving the name of the selected subcontractor.
Submit:	Within five working days of request.

A31 PROVISION, CONTENT AND USE OF DOCUMENTS

DEFINITIONS AND INTERPRETATIONS

110	DEFINITIONS	
	Meaning:	Terms, derived terms and synonyms used in the preliminaries/ general conditions and specification is as stated therein or in the appropriate British Standard or British Standard glossary.
120	COMMUNICATION	
	Definition:	Includes advice, inform, submit, give notice, instruct, agree, confirm, seek or obtain information, consent or instructions, or make arrangements.
	Format:	In writing to the person named in clause A10/140 unless specified otherwise.
	Response:	Do not proceed until response has been received.
130	PRODUCTS	
	Definition:	Materials, both manufactured and naturally occurring, and goods, including components, equipment and accessories, intended for the permanent incorporation in the Works.
	Includes:	Goods, plant, materials, site materials and things for incorporation into the Works.
135	SITE EQUIPMENT	
	Definition:	All appliances or things of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works.
	Includes:	Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.
160	TERMS USED IN SPECIFICATION	
	Remove:	Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fastenings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services.
	Fix:	Unload, handle, store, place and fasten in position including all labours and use of site equipment.
	Supply and fix:	Includes all labour and site equipment for unloading, handling, storing and execution. All products to be supplied and fixed unless stated otherwise.
	Keep for reuse:	Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed.
	Make good:	Execute local remedial work to designated work. Make secure, sound and neat. Excludes redecoration and/ or replacement.
	Replace:	Supply and fix new products matching those removed. Execute work to match original new state of that removed.
	Repair:	Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/ or replacement.
	Refix:	Fix removed products.
	Ease:	Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.

Match existing:	Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
System:	Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.

170 MANUFACTURER AND PRODUCT REFERENCE

Definition:	When used in this combination:
Manufacturer:	The firm under whose name the particular product is marketed.
Product reference:	The proprietary brand name and/ or reference by which the particular product is identified.
Currency:	References are to the particular product as specified in the manufacture's technical literature current on the date of the invitation to tender.

200 SUBSTITUTION OF PRODUCTS

Products:	If an alternative product to that specified is proposed, obtain approval before ordering the product.
Reasons:	Submit reasons for the proposed substitution.
Documentation:	Submit relevant information, including: Manufacturer and product reference; Cost; Availability; Relevant standards; Performance; Function; Compatibility of accessories; Proposed revisions to drawings and specification; Compatibility with adjacent work; Appearance; Copy of warranty/ guarantee.
Alterations:	If needed, advise scope, nature and cost.
Guarantees:	If substitution is accepted, submit before ordering products.

205 SUBSTITUTION OF STANDARDS

Products specified to British Standard or European Standard:	Substitution may be proposed of products complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK.
Before ordering:	Submit notification of all such proposals.
Documentary evidence:	Submit for verification when requested as detailed in clause A31/200. Any submitted foreign language documents must be accompanied by certified translations into English.

210 CROSS REFERENCES

Accuracy:	Check remainder of the annotation or item description against the terminology used in the section or clause referred to.
Related terminology:	Where a numerical cross-reference is not given the relevant sections and clauses of the specification will apply.
Relevant clauses:	Clauses in the referred to specification section dealing with general matters, ancillary products and execution also apply.
Discrepancy:	Before proceeding, obtain clarification or instructions.

220 REFERENCED DOCUMENTS

Conflicts:	Specification prevails over referenced documents.
------------	---

230 EQUIVALENT PRODUCTS

Inadvertent omission:	Wherever products are specified by proprietary name the phrase 'or equivalent' is to be deemed included.
-----------------------	--

250 CURRENCY OF DOCUMENTS (JCT SBC 2011)

Currency:	References to published documents are to the editions, including amendments and revisions, current on the date of the Invitation to tender.
-----------	---

260 SIZES

General dimensions:	Products are specified by their co-ordinating sizes.
Timber:	Cross section dimensions shown on drawings are:

Target sizes as defined in BS EN 336 for structural softwood and hardwood sections.
Finished sizes for non-structural softwood or hardwood sawn and further processed sections.

DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER

410 ADDITIONAL COPIES OF THE DRAWINGS/ DOCUMENTS

Copies: **2no further copies of the drawings and specifications**
Additional copies: Issued on request and charged to the Contractor.

415N SECURITY OF DRAWINGS

All drawings and other information supplied by The Town Council are confidential.
Keep such documents safe at all times, and do no copy of pass to third parties without The Town Council's written permission.

440 DIMENSIONS

Scaled dimensions: Do not rely on.

460 THE SPECIFICATION

Coordination: All sections must be read in conjunction with Main Contract Preliminaries / General Conditions.

470 DIVERGENCE FROM THE STATUTORY REQUIREMENTS

Divergence: Between the drawings or specification and the requirements of the Building Regulations, other Statutes, statutory undertakers and other regulatory authorities.
Action: Inform immediately.

DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

630 TECHNICAL LITERATURE

Information: Keep on site for reference by all supervisory personnel:
Manufacturers' current literature relating to all products to be used in the Works.
Relevant British, EN or ISO Standards.

640 MAINTENANCE INSTRUCTION AND GUARANTEES

Components and equipment: Obtain or retain copies, register with manufacturer and hand over on or before completion of the Works.
Emergency call out services: Provide subcontractors telephone numbers for use after completion.

A32 MANAGEMENT OF THE WORKS

GENERALLY

110 SUPERVISION

General: Accept responsibility for coordination, supervision and administration of the Works, including subcontracts.

120 INSURANCE

Documentary evidence: Submit details before starting work on site and/ or policies and receipts for the insurances required by the Conditions of Contract.

130 INSURANCE CLAIMS

Notice: If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, immediately give notice to the Employer, the person named in clause A10/140 and the Insurers.
Failure to notify: Indemnify the Employer against any loss, which may be caused by failure to give such notice.

140 CLIMATIC CONDITIONS

Information: Record accurately and retain:
Daily maximum and minimum air temperatures (including overnight).
Delays due to adverse weather, including description of the weather, types of work affected and number of hours lost.

150 OWNERSHIP

Alteration/ clearance work:

Materials arising become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.

PROGRAMME/ PROGRESS

205N ORDERING

The Contractor shall place orders for all materials required as soon as his tender is accepted and any likely delay shall be reported in writing.

210 PROGRAMME

Master programme:

When requested and before starting work on site, submit in an approved form a master programme for the Works, which must include details of:

Design, production information and proposals provided by the Contractor/ Subcontractors/ Suppliers, including inspection and checking (see clause 310).

Planning and mobilization by the Contractor.

Earliest and latest start and finish dates for each activity and identification of all critical activities.

Running in, adjustment, commissioning and testing of all engineering services and installations

Work resulting from instructions issued in regard to the expenditure of provisional sums (see section A54)

Work by or on behalf of the Employer and concurrent with the Contract. The nature and scope of which, the relationship with preceding and following work and any relevant limitations are suitably defined in the Contract Documents.

Exclusions:

Where and to the extent that the programme implications for work, which is not so defined, are impossible to assess, the Contractor should exclude it and confirm this when submitting the programme.

230 SUBMISSION OF PROGRAMME

Further information:

Submission of the programme will not relieve the Contractor of the responsibility to advise of the need for further drawings or details or instructions in accordance with the Contract.

240 COMMENCEMENT OF WORK

Notice:

Before the proposed date for commencement of work on site give minimum notice of **14 working days if different to the dates of possession noted within Preliminaries.**

250 MONITORING

Progress:

Record on a copy of the programme kept on site.

Avoiding delays:

If any circumstances arise which may affect the progress of the Works submit proposals or take other action as appropriate to minimize any delay and to recover any lost time.

260 SITE MEETINGS

General:

Site meetings will be held to review progress and other matters arising from administration of the Contract.

Frequency:

To be agreed at the PCM

Accommodation:

Ensure availability at the time of such meetings.

Attendees:

Attend meetings and inform subcontractors and suppliers when their presence is required.

The CA will chair the meetings, take and distribute minutes.

265 CONTRACTOR'S PROGRESS REPORT

General:

Submit a progress report at least **two days** before the site meeting.

Content:

Notwithstanding the Contractor's obligations under the Contract the report must include:

A progress statement by reference to the master programme for the Works.

Details of any matters materially affecting the regular progress of the Works.

Subcontractors' and suppliers' progress reports.

Any requirements for further drawings or details or instructions to fulfil any obligations under Clause 1.7.2 of the Conditions of Contract.

290 NOTICE OF COMPLETION

Requirement:

Give notice of the anticipated dates of completion of the whole or parts of the Works.

Associated works: Ensure necessary access, services and facilities are complete.
Give CA minimum two weeks' notice of the anticipated dates of Practical Completion of the whole or parts of the works.

310 EXTENSIONS OF TIME

Notice: When a notice of the cause of any delay or likely delay in the progress of the Works is given under the Contract, written notice must also be given of all other causes, which apply concurrently.

Details: As soon as possible, submit:
 Relevant particulars of the expected effects, if appropriate related to the concurrent causes.
 An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the Date for Completion.
 All other relevant information required.

315 DISTURBANCE OF REGULAR PROGRESS

Applications under Contract clause 2.7 in respect of direct loss and/or expense:
 Make as soon as practicable and with (or to be followed by) the requisite supporting information so sufficient time is allowed to issue instructions designed (according to the circumstances) to minimise or avoid that loss and/ or expense.

315N ADVERSE/INCLEMENT WEATHER

Use all reasonable and suitable building aids and methods to prevent or minimise delays during adverse weather conditions. Cover up and protect from frost and inclement weather the works in course of erection. The Contractor will be required to make good at his own expense, any part of the works damaged by such cause.

CONTROL OF COST

410 CASH FLOW FORECAST

Submission: Before starting work on site submit a forecast showing the gross valuation of the Works at the date of each Interim Certificate throughout the Contract period and based upon the programme for the Works.

415N PROVISIONAL SUMS

All provisional sums and allowances shall only be expended at the direction of the CA; if not expended, no claim for loss of profit and attendance shall be deemed to be included in such sums.

420 REMOVAL/ REPLACEMENT OF EXISTING WORK

Extent and location: Agree before commencement.
 Execution: Carry out in ways that minimize the extent of work.

430 PROPOSED INSTRUCTIONS

Estimates: If a proposed instruction requests an estimate of cost, submit without delay and in any case within seven days. Include:
 A detailed breakdown of the cost, including any allowance for direct loss and expense.
 Details of any additional resources required.
 Details of any adjustments to be made to the programme for the Works.
 Any other information as is reasonably necessary too fully assess the implications of issuing such an instruction.
 Inability to comply: Inform immediately if it is not possible to comply with any of the above requirements.

440 MEASUREMENT

Covered work: Give notice before covering work required to be measured.

442N DAYWORK:

Do not carry out daywork without the consent of the CA.

444N OVERTIME:

No extra will be allowed for overtime without the written consent of the CA. This also applies to work outside normal working hours.
 No extra cost will be allowed for such works unless written consent has been obtained from the CA.

- 446N VARIATIONS: Variations and omissions made by the CA during the progress of the work will be confirmed in writing and the final account adjusted accordingly. No extras will be allowed to the contractor unless he can produce written confirmation from the CA.
- 450 DAYWORK VOUCHERS
 Before commencing: Give reasonable notice to person countersigning daywork vouchers.
 Content: Before delivery each voucher must be:
 Referenced to the instruction under which the work is authorised.
 Signed by the Contractor's person in charge as evidence that the operatives' names, the time daily spent by each and the equipment and products employed are correct.
 Submit: By the end of the week in which the work has been executed.
- 460 INTERIM VALUATIONS
 Applications: Include details of amounts due under the Contract together with all necessary supporting information.
 Submission: At least seven days before established dates **(we understand the Town Council usually take between 21-28 days for payment from contract due date)**.
- 470 PRODUCTS NOT INCORPORATED INTO THE WORKS
 Ownership: At the time of each valuation, supply details of those products not incorporated into the Works, which are subject to any reservation of title inconsistent with passing of property as required by the Conditions of Contract, together with their respective values.
 Evidence: When requested, provide evidence of freedom of reservation of title.
- 475 PRODUCTS STORED OFF SITE
 Evidence of Title: Submit reasonable proof that the property in 'listed items' is vested in the Contractor.
 Include for products purchased from a supplier:
 A copy of the contract of sale and a written statement from the supplier that any conditions of the sale relating to the passing of property have been fulfilled and the products are not subject to any encumbrance or charge.
 Include for products purchased from a supplier by a subcontractor or manufactured or assembled by any subcontractor:
 Copies of the subcontract with the subcontractor and a written statement from the subcontractor that any conditions relating to the passing of property have been fulfilled.
- 480 LABOUR AND EQUIPMENT RETURNS
 Daily records: Provide at the beginning of each week for verification.
 Records must show: The number and description of craftsmen, labourers and other persons employed on or in connection with the Works, including those employed by subcontractors.
 The number, type and capacity of all mechanical and power-operated equipment employed in constructing the Works.
- 500N CONDUCT
 The conduct of all personnel on the site under the Contractor's direction shall be appropriate to The Town Council's priorities as set out in Section A1. The Town Council shall reserve the right to instruct the Contractor to expel from site any person whose conduct is prejudicial to those priorities.
- 510 NOISE
 The use of radios, audio equipment or the like, will not be permitted where they would cause nuisance or offence to the public or employees of The Town Council.

A33 QUALITY STANDARDS/ CONTROL

STANDARDS OF PRODUCTS AND EXECUTIONS

- 110 INCOMPLETE DOCUMENTATION
 General: Where and to the extent that products or work are not fully documented, they are to be:
 Of a kind and standard appropriate to the nature and character of that part of the Works where they will be used.
 Suitable for the purposes stated or reasonably to be inferred from the project documents.

Contract documents: Omissions or errors in description and/ or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.

120 WORKMANSHIP SKILLS

Operatives: Appropriately skilled and experienced for the type and quality of work.
 Registration: With Construction Skills Certification Scheme.
 Evidence: Operatives must produce evidence of skills/ qualifications when requested.

130 QUALITY OF PRODUCTS

Generally: New. (Proposals for recycled products may be considered).
 Supply of each product: From the same source or manufacturer.
 Whole quantity of each product required to complete the Works:
 Consistent in kind, size, quality and overall appearance.
 Tolerances: Where critical, measure sufficient quantities to determine compliance.
 Deterioration: Prevent. Order in suitable quantities to a programme and use in appropriate sequence.

135 QUALITY OF EXECUTION

Generally: Fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment.
 Colour batching: Do not use different colour batches where they can be seen together.
 Dimensions: Check on-site dimensions.
 Finished work: Not defective, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance.
 Location and fixing of products:
 Adjust joints open to view so they are even and regular.

140 COMPLIANCE

Compliance with proprietary specifications:
 Retain on site evidence that the proprietary product specified has been supplied.
 Compliance with performance specifications:
 Submit evidence of compliance, including test reports indicating:
 Properties tested.
 Pass/ fail criteria.
 Test methods and procedures.
 Test results.
 Identity of testing agency.
 Test dates and times.
 Identities of witnesses.
 Analysis of results.

150 INSPECTIONS

Products and executions:
 Inspection or any other action must not be taken as approval unless confirmed in writing referring to:
 Date of inspection.
 Part of the work inspected.
 Respects or characteristics, which are approved.
 Extent and purpose of the approval.
 Any associated conditions.

160 RELATED WORK

Details:
 Provide all trades with necessary details of related types of work. Before starting each new type or sections of work ensure previous related work is:
 Appropriately complete.
 In accordance with the project documents.
 To a suitable standard.
 In a suitable condition to receive the new work.
 Preparatory work: Ensure all necessary preparatory work has been carried out.

170 MANUFACTURER'S RECOMMENDATIONS/ INSTRUCTIONS

General: Comply with manufacturer's printed recommendations and instructions current on the date of the Invitation to tender.
 Changes to recommendations or instructions:
 Submit details.
 Ancillary products and accessories:
 Use those supplied or recommended by main product manufacturer.
 Agrément certified products:

Comply with limitations, recommendations and requirements of relevant valid certificates.

180 WATER FOR THE WORKS

Mains supply: Clean and uncontaminated.
Other: Do not use until:
Evidence of suitability is provided.
Tested to BS EN 1008 if instructed.

SAMPLES/ APPROVALS

210 SAMPLES

Products or executions: Comply with all other specification requirements and in respect of the stated or implied characteristics either:
To an express approval.
To match a sample expressly approved as a standard for the purpose.

220 APPROVAL OF PRODUCTS

Submissions, samples, inspections and tests:

Undertake or arrange to suit the Works programme.

Approval: Relates to a sample of the product and not to the product as used in the Works. Do not confirm orders or use the product until approval of the sample has been obtained.

Complying sample: Retain in good, clean condition on site. Remove when no longer required.

230 APPROVAL OF EXECUTION

Submissions, samples, inspections and tests:

Undertake or arrange to suit the Works programme.

Approval: Relates to the stated characteristics of the sample. (If approval of the finished work as a whole is required this is specified separately). Do not conceal, or proceed with affected work until compliance with requirements is confirmed.

Complying sample: Retain in good, clean condition on site. Remove when no longer required.

ACCURACY/ SETTING OUT GENERALLY

320 SETTING OUT

General: Submit details of methods and equipment to be used in setting out the Works.

Levels and dimensions: Check and record the results on a copy of drawings. Notify discrepancies and obtain instructions before proceeding.

Inform: CA when complete and before commencing construction.

330 APPEARANCE AND FIT

Tolerances and dimensions:

If likely to be critical to execution or difficult to achieve, as early as possible either:

Submit proposals; or

Arrange for inspection of appearance of relevant aspects of partially finished work.

General tolerances (max): To BS 5606, tables 1 and 2.

340 CRITICAL DIMENSIONS

Critical dimensions: Set out and construct the Works to ensure compliance with the tolerances stated.

350 LEVELS OF STRUCTURAL FLOORS

Maximum tolerances for designed levels to be:

Floors to be self-finished, and floors to receive sheet or tile finishes directly bedded in adhesive: +/- 10 mm.

Floors to receive dry board/ panel construction with little or no tolerance on thickness: +/- 10 mm.

Floors to receive fully bonded screeds/ toppings/ beds: +/- 15 mm.

Floors to receive unbonded or floating screeds/ beds: +/- 20 mm.

360 RECORD DRAWINGS

Site setting out drawing: Record details of all grid lines, setting-out stations, benchmarks and profiles. Retain on site throughout the contract and hand over on completion.

SERVICES GENERALLY

410 SERVICES REGULATIONS

New or existing services:

Comply with the Byelaws or Regulations of the relevant Statutory Authority.

- 420 **WATER REGULATIONS/ BYELAWS NOTIFICATION**
 Requirements: Notify Water Undertaker of any work carried out to or which affects new or existing services and submit any required plans, diagrams and details.
 Consent: Allow adequate time to receive Undertaker's consent before starting work. Inform immediately if consent is withheld or is granted subject to significant conditions.
- 435 **ELECTRICAL INSTALLATION CERTIFICATE**
 Submit: When relevant electrical work is completed
 Original certificate: To be included within the Health and Safety File / O&M Manual
- 445 **SERVICE RUNS**
 General: Provide adequate space and support for services, including unobstructed routes and fixings.
 Ducts, chases and holes: Form during construction rather than cut.
 Coordination with other works: Submit details of locations, types/ methods of fixing of services to fabric and identification of runs and fittings.
- 450 **MECHANICAL AND ELECTRICAL SERVICES**
 Final tests and commissioning: Carry out so that services are in full working order at completion of the Works.
- SUPERVISION/ INSPECTION/ DEFECTIVE WORK**
- 510 **SUPERVISION**
 General: In addition to the constant management and supervision of the Works provided by the Contractor's person in charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress.
 Replacement: Give maximum possible notice before changing person in charge or site agent.
- 512N **PERSON IN CHARGE:** Keep upon the works at all times a competent person in charge, this should be a suitably qualified/experienced Foreman who will deal with the day to day management of the site and the works taking place. The Contractor shall allow for the Foreman to be in attendance for the duration of the contract unless authorised by the CA. Written or verbal instructions given to this person by the CA will be deemed to have been issued to the contractor. Verbal instructions will be confirmed by the CA in writing.
- 515N **UNCOVERING DECAY:** If any structural defects or dry rot is uncovered during the course of opening up the existing works, it is to be reported to the CA immediately who will make an inspection.
- 518N **CONTRACTOR'S PERON-IN-CHARGE**
 Give maximum possible notice to CA before changing the person-in charge.
- 520 **COORDINATION OF ENGINEERING SERVICES**
 Suitability: Site organisation staff must include one or more persons with appropriate knowledge and experience of mechanical and electrical engineering services to ensure compatibility between engineering and the Works generally.
 Evidence: Submit when requested CVs or other documentary evidence relating to the staff concerned.
- 525 **ACCESS**
 Extent: Provide at all reasonable times access to the Works and to other places of the Contractor or subcontractors where work is being prepared for the Contract.
 Designate: **Contract Administrator (CA).**
- 540 **DEFECTS IN EXISTING WORK**
 Undocumented defects: When discovered, immediately give notice. Do not proceed with affected related work until response has been received.
 Documented remedial work:
 Do not execute work, which may:
 Hinder access to defective products or work; or
 Be rendered abortive by remedial work.

550 ACCESS FOR INSPECTION

Removal: Before removing scaffolding or other facilities for access, give CA notice of not less than **two working days for inspection**.

560 TESTS AND INSPECTIONS

Timing: Agree and record dates and times of tests and inspections to enable all affected parties to be represented.

Confirmation: One working day prior to each such test or inspection. If sample or test is not ready, agree a new date and time.

Records: Submit a copy of test certificates and retain copies on site.

610 PROPOSALS FOR RECTIFICATION OF DEFECTIVE PRODUCTS/ EXECUTIONS

Proposals: Immediately any execution or product is known, or appears, to be not in accordance with the Contract, submit proposals for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.

Acceptability: Such proposals may be unacceptable and contrary instructions may be issued.

620 MEASURES TO ESTABLISH ACCEPTABILITY

General: Wherever inspection or testing shows that the work, materials or goods are not in accordance with the contract and measures (e.g. testing, opening up, experimental making good) are taken to help in establishing whether or not the work is acceptable, such measures:

Will be at the expense of the Contractor.

Will not be considered as grounds for extension of time.

630 QUALITY CONTROL

Procedures: Establish and maintain to ensure that the Works, including the work of subcontractors, comply with specified requirements.

Records: Maintain full records, keep copies on site for inspection, and submit copies on request.

Content of records: Identification of the element, item, batch or lot including location in the Works.
Nature and dates of inspections, tests and approvals.
Nature and extent of nonconforming work found.
Details of corrective action.

WORK AT OR AFTER COMPLETION

710 WORK BEFORE COMPLETION

General: Make good all damage consequent upon the Works.
Temporary markings, coverings and protective wrappings: Remove unless otherwise instructed.

Cleaning: Clean the Works thoroughly inside and out, including all accessible ducts and voids. Remove all splashes, deposits, efflorescence, rubbish and surplus materials.

Cleaning materials and methods: As recommended by manufacturers of products being cleaned, and must not damage or disfigure other materials or construction.

COSHH dated data sheets: Obtain for all materials used for cleaning and ensure they are used only as recommended by their manufacturers.

Minor faults: Touch up in newly painted work, carefully matching colour and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions.

Moving parts of new work: Adjust, ease and lubricate as necessary to ensure easy and efficient operation, including doors, windows, drawers, ironmongery, appliances, valves and controls.

720 SECURITY AT COMPLETION

General: Leave the Works secure with, where appropriate, all accesses closed and locked.

Keys: Account for and adequately label all keys and hand over to Employer with itemised schedule, retaining duplicate schedule signed by Employer as a receipt.

730 MAKING GOOD DEFECTS

Remedial work: Arrange access with the **Contract Administrator**

Rectification: Give reasonable notice for access to the various parts of the Works.

Completion: Notify when remedial works have been completed.

A34 SECURITY/ SAFETY/ PROTECTION

SECURITY, HEALTH AND SAFETY

120 EXECUTION HAZARDS

Common hazards: Not listed. Control by good management and site practice.
Also refer to: A12/240
Specification Section B

130 PRODUCT HAZARDS

Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Occupational Exposure Limits.
Common hazards: Not listed. Control by good management and site practice.

140 CONSTRUCTION PHASE HEALTH AND SAFETY PLAN

Submission: Present to the Employer/ Client not less than **two weeks before commencement on site.**
Confirmation: Do not start construction work until the Employer has confirmed in writing that the Construction Phase Health and Safety Plan includes the procedures and arrangements required by CDM Regulation 15(4).
Content: Develop the plan from and draw on the Outline Construction Phase Health and Safety Plan, clause A30/570, and the Pre-tender Health and Safety Plan.

145N HSE APPROVED CODES OF PRACTICE

Comply with the following:
- Management of health and safety at work.
- Managing construction for health and safety.

147N SUSPENSION OF WORK

The Client reserves the right to instruct the Contractor, or any person working for the Contractor, to suspend work if their work poses an imminent risk of serious injury to any person.

150 SECURITY

Protection: Safeguard the site, the Works, products, materials, and any existing buildings affected by the Works from damage and theft.
Access: Take all reasonable precautions to prevent unauthorized access to the site, the Works and adjoining property.
Special requirements: **Enclose site compound and site as shown on the drawings provided with Heras fencing.**
Consult with the CA over security measures to the property, scaffold etc.
At the end of each working day it is the principle contractor's responsibility to ensure all ladders giving access to elevated areas, should have the ladders to the first lift of scaffold removed or ladders generally on site to be removed and placed under lock and key. Where there is an enhanced risk of children on site refer to the HSE document GS/7 'Accidents to Children on Construction Sites' for guidance.
Consult with the CA prior to any works taking over security measures to be implemented in relation to erection of scaffolding.
On commencement the contractor is to report to the Property Manager/CA to obtain advice on the security arrangements for the property and security measures required during the contract. Movement of contractor's personnel is to be restricted to the work area only and the contractor is to ascertain which areas are accessible and/or not to be entered.
At the end of each working day the contractor, with the Property Manager is to verify that the security alarm system and physical security protection are operating/in place (particularly sensors).
Under no circumstances is the integrity of the alarm system or physical security to be affected by the works either by compromising the detection system or works adjacent to or near the alarm panel which may affect its operation.

160 STABILITY

Responsibility: Maintain the stability and structural integrity of the Works during the Contract.
Design loads: Obtain details, support as necessary and prevent overloading.

170 OCCUPIED PREMISES

- Extent: **All fire exits must be kept clear and maintained as fire exits throughout the contract period.**
- Works: Carry out without undue inconvenience and nuisance and without danger to occupants and users.
- Overtime: If compliance with this clause requires certain operations to be carried out during overtime, and such overtime is not required for any other reason, the extra cost will be paid to the Contractor, provided that such overtime is authorized in advance.

210 EMPLOYER'S REPRESENTATIVES SITE VISITS

- Safety: Submit details in advance, to the Employer or the person identified in clause A10/140, of safety provisions and procedures (including those relating to materials, which may be deleterious), which will require their compliance when visiting the site.
- Protective clothing and/ or equipment: Provide and maintain on site for the Employer and the person stated in clause A10/140 and other visitors to the site.

230N ACCESS

The Contractor is to provide at all times during the execution of the works and the defects liability period, proper means of access with ladders etc., and the necessary attendance to move them for the inspection and measurement of the works by the CA.

330 NOISE CONTROL

- Standard: Comply generally with the recommendations of BS 5228-1, clause 9.3 to minimize noise levels during the execution of the Works.
- Noise levels from the works: Maximum level: **85 dB (A)**
- Equipment: Fit compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Restrictions: Do not use:
Pneumatic drills and other noisy appliances **without consent from the Employers Agent.**
Radios or other audio equipment or permit employees to use in ways or at times that may cause nuisance.

340 POLLUTION

- Prevention: Protect the site, the Works and the general environment including streams and waterways against pollution.
- Contamination: If pollution occurs inform immediately, including to the appropriate Authorities and provide relevant information.

350 PESTICIDES

- Use: Not permitted.

355N PLANTING AND VEGETATION

Unless stated otherwise, existing trees and plants are to remain on completion.
Take all care to avoid damaging roots and above ground parts of trees, and plants that are to remain on completion.
Take all care to protect trees and plants that may be damaged by the Works. Agree protection methods with the CA.
Agree with the CA any tying back of vegetation from elevations if necessary for the Works and reinstate upon completion.
Agree with the CA any cutting back necessary for the work.
Do not dump spoil or rubbish, excavate or disturb topsoil, park vehicles or plant, store materials or plant, store materials or place temporary accommodation within the branch spread of trees without the CA's express approval.
Do not sever tree roots exceeding 25mm in diameter without the CA's approval.
Provide with approved replacements, any trees or plants damaged or removed without approval.

360 NUISANCE

- Duty: Prevent nuisance from smoke, dust, rubbish, vermin and other causes.

Surface water: Prevent hazardous build-up on site, in excavations and to surrounding areas and roads.

365N PROTECTION

Adequately protect all parts of the Works, throughout the Contract. Wherever work is of a vulnerable nature or exposed to abnormal risks provide special protection to ensure that damage does not occur.

370 ASBESTOS CONTAINING MATERIALS

Duty: Report immediately any suspected materials discovered during execution of the Works.
Do not disturb.
Agree methods for safe removal or encapsulation.

380 FIRE PREVENTION

Duty: Prevent personal injury or death, and damage to the Works or other property from fire.
Standard: Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by the Construction Confederation and The Fire Protection Association (The 'Joint Fire Code' Order 2005)
The Contractor shall make himself aware of the Clients local fire instructions and procedures to be followed in the event of a fire.
The Contractor shall make himself aware of the location of the nearest telephone.
The Contractor shall ensure that all fire exits and access points for emergency equipment are kept clear at all times and that combustible materials are not left unused on site or adjacent to any building.
Suitable and sufficient adequately maintained fire extinguishers shall be provided by the Contractor for use during the work.
Burning off paint using blow lamps or electrical element burners shall not be permitted
Burning on site of materials arising from the work shall not be permitted.
Except with the CA's express written dispensation, **'Hot Work' shall not be permitted on or within six metres of any building** and the Contractor must allow for alternative methods of work. ('Hot Work' is defined as being all operations involving flame, hot air or arc welding and cutting equipment, brazing and soldering equipment, blow lamps, bitumen boilers and other equipment producing heat or having naked flames)
Do not store Flammable materials on site without the agreement of the CA
The Contractor is to provide on-site at all times on each floor of the building a minimum of one 9 litre water type extinguisher and a 5kg CO2 extinguisher. The Contractor is to ensure that these are regularly maintained/serviced and from an approved manufacturer.
Smoking shall not be allowed at any time in, on or within six metres of buildings
Temporary halogen lights shall not be permitted.

385N EXISTING FIRE PRECAUTIONS

Obtain from the Employer or CA, before commencement, advice on existing fire detection and alarm systems in the property, call points, fire extinguisher positions, fire escape routes, nearest telephone and Fire Station and procedures to be followed in the case of a fire and incorporate with the Contractors Health & Safety Plan.

387N ACTION IN THE EVENT OF FIRE

In the event of discovering fire the Contractor shall call the Fire Brigade and immediately report the fire to the Town Council and to the CA.

390 SMOKING ON SITE

Smoking on site: Not permitted.

400 BURNING ON SITE

Burning on site: Not permitted.

405N WATER

Prevent damage to building fabric and ground finishes, including patina, from storm and surface water including dripping from scaffolding and sheeting.

Protect the works and existing buildings from damage by inclement weather at all times. Allow for any temporary covers. Make good any damage caused by rain or storm or other inclement weather at no cost.

410 MOISTURE

Wetness or dampness: Prevent, where this may cause damage to the Works.
Drying out: Control humidity and the application of heat to prevent:
Blistering and failure of adhesion.
Damage due to trapped moisture.
Excessive movement.

420 INFECTED TIMBER

Removal: Where instructed to remove timber affected by fungal/ insect attack from the building, minimize the risk of infecting other parts of the building.
Testing: Carry out and keep records of appropriate tests to demonstrate that hazard presented by concentrations of airborne particles, toxins and other micro-organisms are within acceptable levels.

425N ELECTRICAL SAFETY

The Contractor shall comply at all times with the latest Electricity at Work Regulations.
All temporary wiring installations provided by the Contractor shall be inspected and tested by a competent person, before use for the first time and at three-monthly intervals thereafter.
All portable electric tools shall, as far as practicable, be supplied from a reduced voltage, (i.e. 110v or less) system.
All portable electric equipment shall be properly maintained, and shall be subject to a regime of inspection and periodic testing.
All electrical connections shall be through correctly fused plugs, sockets and extension leads. All such equipment shall be unplugged at the end of each working day.
The Contractor shall take appropriate precautions when working in the vicinity of overhead power lines: Reference HSE Guidance Note GS6 - Avoidance of Danger from Overhead Electric Lines.
All electrical work shall be carried out by NICEIC registered Contractors.

430 WASTE

Includes: Rubbish, debris, spoil, containers and surplus material.
Minimize: Keep the site and Works clean and tidy.
Remove: Frequently and dispose off site in a safe and competent manner:
Non-hazardous material: In a manner approved by the Waste Regulation Authority.
Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations.
Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in.
Waste transfer documentation: Retain on site.

440 ELECTROMAGNETIC INTERFERENCE

Duty: Prevent excessive electromagnetic disturbance to apparatus outside the site.

450 LASER EQUIPMENT

Construction laser equipment: Install, use and store in accordance with BS EN 60825-1 and the manufacturer's instructions.
Class 1 or Class 2 laser equipment: Ensure laser beam is not set at eye level and is terminated at the end of its useful path.
Class 3A and Class 3B laser equipment: Do not use without approval and subject to submission of a method statement on its safe use.

500N DRYING THE WORKS

Provide all apparatus, fuel, power and attendance as necessary for drying the works

PROTECT THE FOLLOWING**510 EXISTING SERVICES**

- Confirmation: Notify all service authorities, statutory undertakers and/ or adjacent owners of proposed works not less than one week before commencing site operations.
- Identification: Before starting work, check and mark positions of mains/ services. Where positions are not shown on drawings obtain relevant details from service authorities, statutory undertakers or other owners.
- Work adjacent to services: Comply with service authority's/ statutory undertaker's recommendations. Adequately protect, and prevent damage to services: Do not interfere with their operation without consent of service authorities/ statutory undertakers or other owners.
- Identifying services: Below ground: Use signboards, giving type and depth;
Overhead: Use headroom markers.
- Damage to services: If any results from execution of the Works: Immediately give notice and notify appropriate service authority/ statutory undertaker. Make arrangements for the work to be made good without delay to the satisfaction of service authority/ statutory undertaker or other owner as appropriate. Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability.
- Marker tapes or protective covers: Replace, if disturbed during site operations to service authority's/ statutory undertakers recommendations.

520 ROADS AND FOOTPATHS

- Duty: Maintain roads and footpaths within and adjacent to the site and keep clear of mud and debris, except where closure is in force.
- Damage caused by site traffic or otherwise consequent upon the Works: Make good to the satisfaction of the Employer, Local Authority or other owner.

530 RETAINED TREES/ SHRUBS/ GRASSED AREAS

- Protection: Preserve and prevent damage, except those not required.
- Replacement: Mature trees and shrubs if uprooted, destroyed, or damaged beyond reasonable chance of survival in their original shape, as a consequence of the Contractor's negligence, must be replaced with those of a similar type and age at the Contractor's expense.

540 EXISTING FEATURES

- Protection: Prevent damage to existing buildings, fences, gates, walls, roads, paved areas and other site features, which are to remain in position during execution of the Works.
- Special requirements: **Road plates or plywood sheeting to existing roads and footpaths to be traversed.**

570 EXISTING WORK

- Protection: Prevent damage to existing property undergoing alteration or extension.
- Removal: Minimum amount necessary.
- Replacement work: To match existing.

580 BUILDING INTERIORS

- Protection: Prevent exposure to weather during course of alteration work.

582N BUILDING INTERIORS

- Protection: Prevent exposure to weather during course of alteration work, with temporary enclosures of sufficient size to permit execution of the work and which will remain weathertight in severe weather.

600 EXISTING FURNITURE, FITTINGS AND EQUIPMENT

- Protection: Prevent damage or move as necessary to enable the Works to be executed. Reinstall in original positions.
- Extent: Before work in each room starts the Employer will remove the following:

630 EXISTING STRUCTURES

Duty:	Check proposed methods of work for effects on adjacent structures inside and outside the site boundary.
Supports:	During execution of the Works: Provide and maintain all incidental shoring, strutting, needling and other supports as may be necessary to preserve stability of existing structures on the site or adjoining that may be endangered or affected by the Works. Do not remove until new work is strong enough to support existing structure. Prevent overstressing of completed work when removing supports.
Adjacent structures:	Monitor and immediately report excessive movement.
Standard:	Comply with BS 5975.

A35 SPECIFIC LIMITATIONS ON METHOD/ SEQUENCE/ TIMING**110 SCOPE**

General: The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.

130 METHOD/ SEQUENCE OF WORK

Specific Limitations: **To be agreed at the pre-contract site meeting.**

140 SCAFFOLDING

Standing scaffolding: Make available to subcontractors at all times.

170 WORKING HOURS

Specific limitations: **To be agreed at the pre-contract site meeting.**

Works outside of these hours must be agreed in advance with the Employer and Contract Administrator.

180 COMPLETION IN SECTIONS OR IN PARTS

General: Where the Employer is to take possession of any section or part of the Works and such section or part will, after its practical completion, depend for its adequate functioning on work located elsewhere on the site: Complete such other work in time to permit such possession to take place.

Remainder of the Works:

During execution, ensure that completed Sections or parts of the Works have continuous and adequate provision of services, fire precautions, means of escape and safe access.

A36 FACILITIES/ TEMPORARY WORKS/ SERVICES**GENERALLY****110 SPOIL HEAPS, TEMPORARY WORKS AND SERVICES**

Location: Give notice of intended siting.

Maintenance: Alter, adapt and move as necessary. Remove when no longer required and make good.

ACCOMMODATION**230 TEMPORARY ACCOMMODATION**

Proposals for temporary accommodation and storage for the Works:

Submit two weeks prior to the Commencement Date.

Details to be included: Type of accommodation and storage, its siting and the programme for site installation and removal.

Available services: To be provided by the Employer

292N CONTRACTOR'S WORKING AREA

- The contractor is to confine his activities to the smallest possible area of the site for the execution of the Works and storage of materials, unless otherwise defined.

350N SCAFFOLDING

All scaffolding shall comply with TG20:21

- All scaffolds to be fully independent.
- No putlog scaffolds will be permitted.
- Bracing of scaffolding from buildings will only be permitted with prior agreement from the CA.
- All scaffold tubes are to be fitted with protective plastic end caps and are to be free from rust.
- All scaffolding must be adequately earthed against lightning strikes.
- All scaffolding shall be erected by NASC registered scaffolders.

- Extreme care must be taken to avoid damage to buildings and grounds during the erection or striking of scaffolding.
- At the end of each day's work and in rain, measures should be taken to prevent splashing to the property.

360N HEIGHT

No scaffold from which a person could fall more than 2 metres should be used unless:

- It has been inspected by a competent person:
 - Before being used.
 - After substantial installation.
 - After any event likely to have affected its stability.
 - At regular intervals not exceeding 7 days.
- A record has been made of the inspection (other than for a mobile tower scaffold in place less than 7 days) containing the details specified in HSE booklet HSG150.

360N LADDERS

Ladders and other items of equipment must not be left unattended when accessible to the general public. When the site is not being worked on, all ladders shall have their first lift ladder removed and placed under lock and key. All loose ladders shall be similarly chained and locked or removed from the site. Scaffolds and other associated equipment, erected in area accessible to the general public, must be provided with warning tape at least 3 metres clear of the scaffold where practicable to deter unauthorised access.

380N ESSENTIAL ACCESS TO THE PROPERTY

Agree with the CA special precautionary arrangements under a working scaffold or where specific security arrangements are required

TEMPORARY WORKS

310 TEMPORARY WORKS

Employer's Specific Requirements: **Provide temporary barrier to enclose site compound.**

340 NAME BOARDS/ ADVERTISEMENTS

General: Obtain approval, including statutory consents, and provide a temporary name board displaying:
 Title of project:
 Name of Employer:
 Names of Consultants: Philips Surveyors LLP
 Names of Contractor and Subcontractors: If the contractor wishes.

SERVICES AND FACILITIES

410 LIGHTING

Finishing work and inspection:
 Provide temporary lighting, the intensity and direction of which closely resembles that delivered by the permanent installation.

420 LIGHTING AND POWER

Supply: Electricity from the Employer's mains may be used for the Works and will be supplied to the Contractor free of charge for the duration of the contract.

Continuity: **The Employer will not be responsible for the consequences of failure or restriction in supply.**
 All electrically power operated tools and equipment must be rated at 100volts. All transformer and electrical power sources are to be provided by the Contractor. Where this is not practicable, the supply should be protected by a residual current device (RCD) complying with BS IEC 1008-2-2:1990, BS EN 61008-2-1:1995, BS EN 61008-1:2004+A12:2009, the device should operate if the earth leakage current exceeds 30 mA.

430 WATER

Supply: The Employer's mains may be used for the Works and will be supplied to the contractor free of charge for the duration of the contract.

Continuity: The Employer will not be responsible for the consequences of failure or restriction in supply.

435N WATER RESTRICTIONS

If the water supply is or is likely to be restricted by emergency legislation, inform CA without delay and ascertain the availability and additional cost of water from alternative sources.

440 MOBILE TELEPHONES

Direct communication: As soon as practicable after the Date of Possession provides the Contractor's person in charge with a mobile telephone.

520 USE OF PERMANENT HEATING SYSTEM

Installation: If used the contractor shall:
Take responsibility for operation, maintenance and remedial work.
Arrange supervision by and indemnification of the appropriate Subcontractors.
Pay costs arising.

530 BENEFICIAL USE OF INSTALLED SYSTEMS

Permanent systems: Unless specific permission is given by the Employer and installer, do not use for any purpose other than running in, testing and commissioning.
Other uses: If permission is given for any other use of a system before the Works are accepted as complete it must be subject to a separate written agreement between the parties and in accordance with the recommended procedures given in NJCC Guidance Note 10.

540 METER READINGS

Charges for service supplies: Where to be apportioned ensure that:
Meter readings are taken by relevant authority at possession and/ or completion as appropriate.
Copies of readings are supplied to interested parties.

550 THERMOMETERS

General: Provide onsite and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.

A37 OPERATION/ MAINTENANCE OF THE FINISHED BUILDING

105N The manual is valued by the client at **£750**, this amount will not be included in any valuations until the manual is completed to the satisfaction of the Client, Design Team and CDM Coordinator.

The principle contractor will be responsible as noted below for provision and collation of all information requested including obtaining specific information from the design team for the works completed.

GENERALLY

110 THE BUILDING MANUAL

Purpose: The Building Manual (incorporating the Health and Safety File) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the building and its systems to enable efficient and safe operation and maintenance.

Compilation: Prepare all information for Contractor designed or performance specified work including as-built drawings.
Obtain or prepare all other information to be included in the Manual.

Content: Part 1: General: Content as clause 130.
Part 2: Building fabric: Content as clause 140.
Part 3: Building services: Content as clause 150.

Responsibility: The Building Manual is to be produced by the Principle Contractor and must be complete no later than 2 weeks prior to completion.

Information provided by others: Details: Subcontractors, Designers, Mechanical & Electrical designers and Architect.

Presentation of Manual: As clause 160.

Reviewing the Manual: Submit a complete draft. Amend in the light of any comments and resubmit. Do not proceed with production of the final copies until authorized.

As part of the commission for the design team the CA/M&E consultant is to formally check the contractors supplied information to confirm that they provide sufficient information to maintain the elements of works, equipment and plant including controls in the future. The designers shall sign to note that it is to their satisfaction.

In addition to checking of the information, once the draft documentation has been prepared the client in conjunction with his Maintenance Surveyor or service engineer will review the supplied information to confirm that it supplies adequate information for maintenance purposes of the building.

Final copies of the Manual:

Number of copies: 2.

Latest date for submission; 2 weeks before the date for completion stated in the contract.

As-built drawings: 2no CD copies

115 THE HEALTH AND SAFETY FILE

Responsibility: Contractor

Content: Obtain and Provide the following information: as detailed elsewhere.

Format: 3no hard copies and 3no soft copies on CD

Delivery to: CDM Coordinator By (date): 3 weeks after Practical Completion.

120N CONTENT OF THE BUILDING MANUAL PART 1: GENERAL

Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:

Index: list the constituent parts of the manual, together with their location in the document.

The Works:

- Description of the buildings and facilities.
- Ownership and tenancy, where relevant.
- Health and Safety information - other than that specifically required by the Construction (Design and Management) Regulations.

The Contract:

- Names and addresses and contact details of all significant consultants, contractors, subcontractors, suppliers and manufacturers.
- Overall design criteria.
- Environmental performance requirements.
- Relevant authorities, consents and approvals.
- Third party certification, such as those made by "competent" persons in accordance with the Building Regulations.

Operational requirements and constraints of a general nature:

- Maintenance contracts and contractors.
- Fire safety strategy for the buildings and the site. Include drawings showing emergency escape and fire appliance routes, fire resisting doors, location of emergency alarm and firefighting systems, services, shut off valves, switches, etc.

Details / location of any amended incoming services including drawings and details identifying type and size of service, location and emergency isolation / shut off procedures / controls.

- Emergency procedures and contact details in case of emergency.
- Other specific requirements: N/A

Description and location of other key documents.

Timescale for completion: 3 weeks after Practical Completion.

Shall include all As built specification, workmanship and materials clauses, schedule of works and drawings incorporating all variations, instructions and material changes within the contract.

130N CONTENT OF THE BUILDING MANUAL PART 2: BUILDING FABRIC

Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:

Detailed design criteria, including:

- Floor and roof loadings.
- Durability of individual components and elements.
- Loading restrictions.
- Insulation values.
- Fire ratings.
- Other relevant performance requirements.
- Construction of the building:
 - A detailed description of methods and materials used.
 - As-built drawings recording the construction, together with an index.

- Information and guidance concerning repair, renovation or demolition/ deconstruction.
- Periodic building maintenance guide chart.
- Inspection reports.
- Manufacturer's instructions index, including relevant COSHH data sheets and recommendations for cleaning, repair and maintenance of components. Including specific mention to any hazards associated with materials used (e.g. Hazardous substances, lead paint, specialist coatings)
- Fixtures, fittings and components schedule and index.
- Guarantees, warranties and maintenance agreements - obtain from manufacturers, suppliers and subcontractors.
- Test certificates and reports required in the specification or in accordance with legislation, including:
 - Air permeability.
 - Resistance to passage of sound.
 - Continuity of insulation.
 - Electricity and Gas safety.
- Shall include all As built specification, workmanship and materials clauses, schedule of works and drawings incorporating all variations, instructions and material changes within the contract.
- Shall provide details of any client or user maintenance activities or checking necessary as part of the maintenance regimes for the property and include these within a table format.
- Other specific requirements: N/A
- Timescale for completion: 3 weeks after Practical Completion

140N CONTENT OF THE BUILDING MANUAL PART 3: BUILDING SERVICES

Content: Obtain and provide the following, including all relevant details not included in other parts of the manual:

Detailed design criteria and description of the systems, including:

- Services capacity, loadings and restrictions
- Services instructions.
- Services log sheets.
- Manufacturers' instruction manuals and leaflets index.
- Fixtures, fittings and component schedule index.

Detailed description of methods and materials used.

As-built drawings for each system recording the construction, together with an index, including:

- Diagrammatic drawings indicating principal items of plant, equipment and fittings.
- Record drawings showing overall installation.
- Schedules of plant, equipment, valves, etc. describing location, design performance and unique identification cross referenced to the record drawings.
- Identification of services - a legend for colour coded services.

Product details, including for each item of plant and equipment:

- Production of a maintenance and plant schedule which should include frequency of maintenance or testing / inspection.
- Name, address and contact details of the manufacturer.
- Catalogue number or reference.
- Manufacturer's technical literature, including detailed operating and maintenance instructions.
- Information and guidance concerning dismantling, repair, renovation or decommissioning.

Operation: A description of the operation of each system, including:

- Starting up, operation and shutting down. Including emergency procedures operation of systems.
- Control sequences.
- Procedures for seasonal changeover.
- Procedures for diagnostics, troubleshooting and fault-finding.

Guarantees, warranties and maintenance agreements - obtain from manufacturers, suppliers and subcontractors.

Commissioning records and test certificates list for each item of plant, equipment, valves, etc. used in the installations - including:

- Electrical circuit tests.
- Corrosion tests.
- Type tests.
- Work tests.
- Start and commissioning tests.

Equipment settings: Schedules of fixed and variable equipment settings established during commissioning.

Preventative maintenance: Recommendations for frequency and procedures to be adopted to ensure efficient operation of the systems.

Lubrication: Schedules of all lubricated items.

Consumables: A list of all consumable items and their source.

Spares: A list of recommended spares to be kept in stock, being those items subject to wear and tear or deterioration and which may involve an extended delivery time when replacements are required.

Emergency procedures for all systems, significant items of plant and equipment.

Annual maintenance summary chart.

Shall include all As built specification, workmanship and materials clauses, schedule of works and drawings incorporating all variations, instructions and material changes within the contract.

Shall provide details of any client or user maintenance activities or checking necessary as part of the maintenance regimes for the property and include these within a table format, noting operation / period / monitoring / record.

Maintenance and cleaning instructions

Other specific requirements: N/A

Timescale for completion: 3 weeks after Practical Completion

150N CONTENT OF THE BUILDING MANUAL PART 4: THE HEALTH AND SAFETY FILE

Content: Obtain and provide the following, including all relevant details not included in other parts of the manual, including:

Residual hazards and how they have been dealt with, which shall include designer's information and assessments on completed project.

Design statement confirming the key aspects of the design indicating any significant or unusual aspects that could affect the health and safety of other parties involved in the future maintenance, cleaning, periodic replacement including the design considerations for safe access for future cleaning and maintenance requirements and plant/equipment unit replacement.

Hazardous materials used.

Information regarding the removal or dismantling of installed plant and equipment.

Health and safety information about equipment provided for cleaning or maintaining the structure, or details of specific specialist equipment and processes needed to access or maintain the complete project, including method statements for implementation of the maintenance access.

The nature, location and markings of significant services

Information and as-built drawings of the structure, its plant and equipment.

Timescale for completion: 3 weeks after Practical Completion

Submit to: CDM Coordinator

160 PRESENTATION OF BUILDING MANUAL

Format: A4 size, plastics covered, loose leaf, four ring binders with hard covers, each indexed, divided and appropriately cover titled.

Selected drawings needed to illustrate or locate items mentioned in the Manual: Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings.

As-built drawings: The main sets may form annexes to the Manual.

190 MAINTENANCE SERVICE

Scope: Provide a comprehensive maintenance service for the following items of plant and equipment: Include all planned preventative maintenance, as set out within the maintenance schedule and replacement of all consumable items:

Terms: N/A

Commencement: N/A

Duration: N/A

220N TRAINING

Objective: Before Completion, explain and demonstrate to the Employer's maintenance staff the purpose, function and operation of the installations including items and procedures listed in the Building Manual.

Operating time: Include a minimum of 1 days.

The specific training should include explanation of the Building Manual.

230 SPARE PARTS

General: Before Completion submit a priced schedule of spare parts that the Contractor recommends should be obtained and kept in stock for maintenance of the services installations.

Content: Include in the priced schedule for:

- Manufacturers' current prices, including packaging and delivery to site.
- Checking receipts, marking and numbering in accordance with the schedule of spare parts.
- Referencing to the plant and equipment list in Part 3 of the Building Manual.
- Painting, greasing, etc. and packing to prevent deterioration.

Latest date for submission: N/A

250 TOOLS

General: Provide tools and portable indicating instruments for the operation and maintenance of all services plant and equipment (except any installed under Named Subcontracts) together with suitable means of identifying, storing and securing.

Quantity: Two complete sets.

Time of submission: At completion.

SECTION B

Health & Safety

PRE-CONSTRUCTION HEALTH & SAFETY PLAN
FOR
REPLACEMENT DECKING & ASSOCIATED PARAPET REBUILDING WORKS
AT
ARUNDEL TOWN HALL, MALTRAVERS STREET, ARUNDEL, WEST SUSSEX.
BN18 9AP



CDMC: Philips Surveyors LLP c/o Philip Wiltshire MRICS IMaPS

REF: POW/2595/24

DATE: June 2024

ISSUE NO: 1



RICS



Philips Surveyors LLP
The Old Coach House
78 Lower Street, Pulborough
West Sussex RH20 2AA
Tel: 01798 873222
E-mail: info@philips-surveyors.co.uk

1.0	Description of Project
2.0	Clients Considerations and Management Requirements
3.0	Environmental Restrictions and Existing On-Site Works
4.0	Significant Design and Construction Hazards
5.0	The Health and Safety File
Appendix A	Initial F10 Notification – N/A
Appendix B	N/A

INTRODUCTION

This pre-construction information has been prepared based on information provided by the Client and from design information known at this stage of the project.

The document aims to provide or identify the source of all relevant information about the site and the programming and nature of the works and to describe aspects of the construction that are likely to be a significant risk to the health and safety of any person carrying out the work or any person affected by the work. It is not the intention of the document to describe every day to day hazard that would be encountered during the normal construction processes associated with the works of this project.

It should not be assumed that this is a definite list of hazards that may be encountered in the works as other hazards, not yet known or identified, may present themselves during the course of the works.

The Health and Safety Plan and all issues related to Health and Safety for the project should be considered as a 'live' document and a 'living' subject which must and shall be developed during the course of time throughout the project.

1.0 DESCRIPTION OF PROJECT

1.1 Project Description

Arundel Town Hall – Replacement decking & associated parapet rebuilding works.

1.2 Programme Details:

Tender Return	As per the tender form
Commencement	28 th October 2024
Completion	12 th December 2024
Contract Duration	7 weeks on site

1.3 Employer

Arundel Town Council
Maltravers Street, Arundel, West Sussex. BN18 9AP.

1.4 Principal Designer

Name: Philips Surveyors LLP c/o Philip Wiltshire MRICS IMA PS
Address: The Old Coach House, 78 Lower Street, Pulborough RH20 2AZ
Tel: 01798 873222

1.6 Principal Contractor (Hereafter referred to as The Contractor)

TBC

1.7 Proposed End Use of Structure/s

Existing Historic Structure – decking to be used for events and weddings.

1.8 Extent and Location of Existing Records and Plans

Existing drawings provided within Section A of the specification.

2.0 EMPLOYERS CONSIDERATIONS AND MANAGEMENT REQUIREMENTS

2.1 Employers Planning and Management for the Construction Work

Philips Surveyors LLP (Philip Wiltshire MRICS IMA PS) will undertake day to day liaison with the Contractor and carry out the role of Contract Administrator whilst also being responsible for reporting back to the Client at appropriate times during the works and undertaking of day to day liaison and coordination of information relating to the project.

The Employer will attend formal site meetings meeting to discuss any relevant health and safety issues with the CDM Principal Designer, Contractor and his sub-contractors.

The Employer will ensure that the construction work can be carried out so far as is reasonably practical without risk to the health and safety of any person.

The Employer will provide (or agree to the provision by others) of adequate and safe welfare facilities for use of all operatives or visitors in connection with the works in accordance with Schedule 2 of the Construction (Design & Management) Regulations 2015, namely:

- I. Sanitary conveniences (use toilet facilities on site 9.00am to 5.00pm)
- II. Washing Facilities (use toilet facilities on site 9.00am to 5.00pm)
- III. Drinking Water (use kitchen and breakfast room)
- IV. Changing Room and Lockers (use facilities available on site 9.00am to 5.00pm)
- V. Facilities for Rest (use facilities available on site 9.00am to 5.00pm)

Proposals shall be detailed in full within the Construction Phase Plan submitted to the client for review under Regulation 16, this shall include a schematic showing the compound layout and welfare facilities.

The Employer will ensure that the Contractors security measures in place during the works are not interfered with and are maintained for the duration of the project.

The Employer shall be made aware that they or anyone acting on their behalf, will not gain access to the site area unless supervised by the site foreman or other representative of the Contractor.

2.2 Construction Phase Plan

The Principal Contractor shall prepare a Construction Phase Plan (CPP) which encompasses all relevant sections required by L153 Appendix 3 in accordance with the requirements set out in the Construction (Design and Management) Regulations 2015 and the HSE's 153 Managing Health and Safety in Construction Guidance on Regulations, which is to be submitted to the Principal Designer no later than 7 working days prior to the planned start of the construction phase, for review by the Principal Designer to advise the client of its compliance with Part 4, Regulation 16.

Commencement of works will not be permitted on site until the CPP is deemed compliant by the Principal Designer on behalf of the client and an instruction is given by the client for commencement to proceed.

The Principal Contractor must plan, manage and co-ordinate work during the construction phase, taking account of the information contained within this Pre-Construction Information Pack and provided by the Principal Designer and other Designers on behalf of the client, and any other information provided by contractors or sub-contractors associated with the project.

2.3 Health and Safety Goals of the Project

For there to be no reporting of injuries, disease or dangerous occurrences (RIDDORS) during the project.

The Employer's goal is to ensure that there is no risk during the work to the Contractors operatives, staff, pupils or site visitors at any time during the project.

The Employer acknowledges that arrangements will be put in place to maintain adequate and safe welfare facilities for all operatives while undertaking the works on site.

2.4 Site Fencing / Movement of Material / Loading Requirements

All works and materials on site shall be fully protected and separated from areas accessible to members of the public and or road users etc. using heras fencing or Chapter 8 fencing.

The working areas are clearly defined on the working drawings and the Contractor and his operatives shall not venture beyond the limits of each site without an express reason to do so.

The Principal Contractor shall provide full details of all such arrangements within their Construction Phase Health and Safety plan for review and approval of the Principal Designer.

Work underway must be fully protected at all times and upon leaving each site, the Contractor must ensure that all necessary barriers, lights, fencing, signage etc. are installed to protect members of the public and staff.

2.5 Overlap with Employers Undertakings

The Town Hall will be in use for meeting and staff are in occupation. The decking and roof area will not be used by the Town Council during the works, however, the means of escape from upper chamber will need to be maintained when the upper room is in use.

2.6 Safety Equipment

The Contractor shall ensure that all operatives, sub-contractors and members of the Employer's design team wear safety helmets to BS5240, safety footwear and any such safety equipment as necessary at all times within the site boundaries. Signs demonstrating that the site is a 'Hard Hat Site' shall be on view at all times.

2.7 Signs

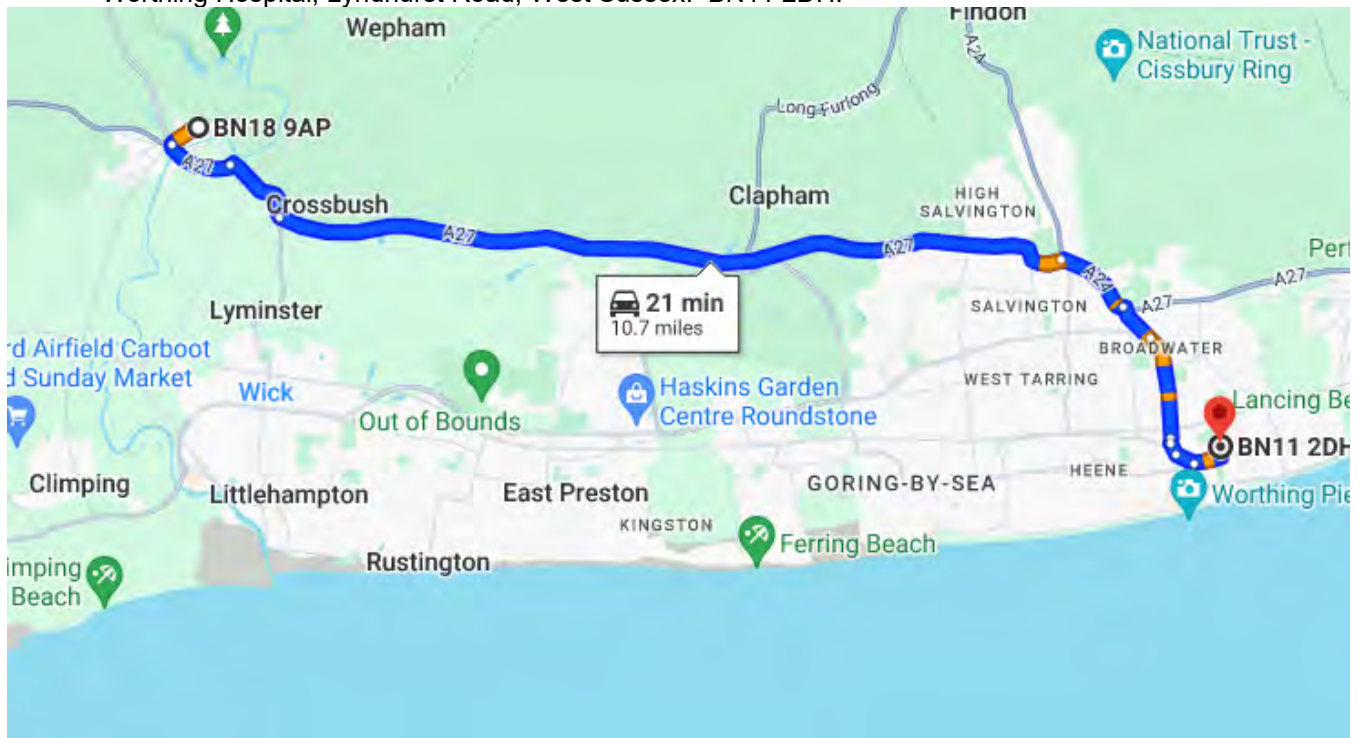
Warning signs are to be provided to all site boundaries warning of the dangers of construction sites.

2.8 Emergency Procedures

In case of fire, the Contractor must ensure that all operatives abide by predetermined fire evacuation procedures appropriate to the site. These are to be explained by the Site Foreman during a site induction prior to commencing work on either site.

Nearest A&E Department

Worthing Hospital, Lyndhurst Road, West Sussex. BN11 2DH.



2.9 Employers Site Transport Arrangements or Vehicle Movement Restrictions

The site is located at the rear of the Town Hall and access to the work area shall be via the existing external metal fire escape stair case. Access to the car park is via the access drive to the west of the main building off Maltravers Street. The access is narrow and a tight turn in so limit the size of delivery vehicles. Limited turning is available within the car park. Any reversing vehicles must ensure that a banksman is employed. There are double yellow lines along Maltravers Street and ensure the road is not blocked at any time.

2.10 Parking Restrictions

Three car parking spaces will be available for the contractor within the designated spaces in the car park ensuring the access is not blocked

2.11 Employers Permit to Work Systems

The following permit to work systems must be established by the Contractor:

Hot Works

All and any hot works will need to be agreed with the Principal Designer and Contract Administrator in advance and will require appropriate RAMS prior to undertaking. Use of naked flames is strictly prohibited.

2.12 Fire Precaution, Emergency Procedures and Means of Escape

The Contractor must ensure that all operatives are suitably fire trained and site inducted in respect of a procedure to follow in the event of fire evacuation which shall include a defined muster point. Fire extinguishers must be provided which are to be available at all times during any hot works and at the point where the works are taking place. Use of naked flames is strictly prohibited.

2.13 Restricted Access Areas

No access to other areas of the Town Hall will be permitted unless associated with the works or access to the welfare.

2.13 Footpath

Any vehicular access crossing the footpath must have banksman employed to temporarily restrict pedestrian access.

2.14 **Employer Site Rules**

The Contractor shall ensure that all workmen directly and/or indirectly employed, suppliers and **all other persons** upon the site are advised in writing of the following rules:

The following are **not** permitted:

1. Smoking;
2. Alcohol (whether being consumed or not);
3. Drugs (whether being consumed or not) apart from general medication;
4. Blasphemous language (swearing);
5. Profane acts of behaviour and acts contravening health and safety;
6. Behaviour inappropriate to others on the site;
7. Pornography;
8. Radios or audio equipment;
9. Open fires;
10. Animals (pets etc.);
11. Persons not employed on the works such as family members (partners, wives, girlfriends/boyfriends, children etc.) and friends.

Note: Any person contravening the above rules will be instructed to remove themselves from the site immediately by the Principal Contractor and/or Employers Agent.

3.0 **ENVIRONMENTAL RESTRICTIONS AND ON SITE RISKS**

3.1 **Boundary and Access**

Site boundaries are indicated on the tender drawings. The Contractor must not venture past the designated compound, parking and or works areas on either site without prior agreement or an express reason to do so. Public rights of ways must be maintained at all times.

3.2 **Delivery Restrictions and Waste Collection or Storage**

Storage is only available within the Town Hall Car Park.

Note : width restrictions of 3.5 m – Skips to be positioned at the far end of the car park to maintain access.

3.3 **Adjacent Land Use**

Primarily residential occupation in the middle of Arundel town centre.

3.4 **Existing Storage of Hazardous Materials**

No storage of hazardous or flammable materials is proposed or permitted on site.

3.5 **Location of Existing Services**

The Contractor shall ascertain the presence and location of existing services on site as necessary prior to commencing work. Also refer to drawings.

3.6 **Existing Structures**

The Town Hall is a large, detached building facing onto Maltravers Street which runs along the north of the property. There is shared vehicular access to the west, whilst the southern and eastern sides form boundaries with the adjacent properties.

The building is Grade II listed and built in 1838 and extended in 1950 with the Holmes Chamber upon which the decking sits.

3.7 **Relevant Plant and Equipment in the Vicinity of the Works**

The Contractor must visit and inspect each site and take account of any plant or equipment that may need to be moved or adapted to allow the works as specified to be carried out.

3.8 **Relevant Issues from Previous Health and Safety Files / Information**

NA

HEALTH HAZARDS

3.9 **Asbestos**

No asbestos is anticipated to be present in any areas of works proposed. See asbestos management survey in Appendix B. Existing hidden bitumen DPCs may contain asbestos and therefore surveys are to be undertaken in advance of the works.

3.10 Contaminated Land
NA

3.11 Existing Structures Containing Hazardous Materials
As Section 3.9 above.

3.12 Health Risks from Employers Activities
Public access via external staircase and emergency access from first floor rooms.

4.0 SIGNIFICANT DESIGN AND CONSTRUCTION HAZARDS

4.1 Design Assumptions, Suggested Work Methods, Sequences & Other Construction Methods
Ensure guard railing is installed externally to the perimeter before removal of the existing internal guard railing and work commences on the rebuilding of the parapets. Make sure single leaf of parapet that is retained is secure and any loose sections removed.

Do not store copings and other brickwork on the existing flat roof as the load capacity is not known.

There are three residential properties that have a right of access as indicated on the block plan. Please avoid blocking their pedestrian and vehicular access.

4.2 Arrangements for Coordination of Ongoing Design Work and Design Changes
All new design information associated with the works at either site must be forwarded to the Designer / Contract Administrator well in advance of design change work proceeding. Any significant changes by the Contractor to the design which affects the build method should be forwarded by the Contractor to the Designer / Contract Administrator.

4.3 Materials / Activities Requiring Particular Precaution

- Deliveries to and from site including, unloading and skips which must have banksman at all times;
- Restricted nature of the site;
- Vehicular access to and from the site;
- Restricted movement of materials, plant and equipment around the site;
- Access to high level repairs requiring scaffold access;
- Manual handling - movement of copings and brickwork from and too;
- Potential asbestos to damp proof courses to the roof areas and to the parapets

5.0 THE HEALTH AND SAFETY FILE

The Health and Safety file will be prepared by the Contract Administrator to include the following information where relevant. Employers, designers, principal and other Contractors must supply the information to facilitate the compilation of the health and safety file.

- A) A brief description of the work carried out
- B) Any residual hazards which remain and how they have been dealt with (e.g. surveys or other information concerning asbestos; contaminated land; water bearing strata; buried services etc.
- C) Key structural principles (e.g. bracing, sources of substantial stored energy – including pre-or post-tensioned members) and safe working loads for floors and roofs, particularly where these may preclude placing scaffolding or heavy machinery there.
- D) Hazardous materials used (e.g. lead paint; pesticides; special coatings which should not be burnt off etc.).
- E) Information regarding the removal or dismantling of installed plant and equipment (e.g. any special arrangements for lifting, order or other special instructions for dismantling etc.).
- F) Health and safety information about equipment provided for cleaning or maintaining the structure.

- G) The nature, location and markings of significant services, including over roof cables, gas supply equipment, firefighting services etc.
- H) Information and as built drawings of the structure, its plant and equipment (e.g. means of safe access to and from service voids, fire doors and compartmentalisation etc.

SECTION C

Trade Preliminaries (NBS)

SECTION C – SPECIFIC AND TRADE PRELIMINARIES

C20 DEMOLITION

To be read with Preliminaries/ General conditions

GENERAL REQUIREMENTS

110 DESK STUDY/ SURVEY

- Scope: Before starting demolition work, examine available information, carry out a survey of the structures, site and surrounding area.
- Report and method statements: Submit, describing:
 - Form, condition and details of the structures, site and surrounding area.
Extent: parapet wall .
 - Form, location and removal methods of flammable, toxic or hazardous materials.
 - Form, location and removal methods of materials for reuse or recycling.
 - Type and location of adjoining or surrounding premises which may be adversely affected by noise, vibration, dust or removal of structure.
 - Identification and location of services above and below ground, including those required for the Contractor's own use. Arrangements for disconnection and removal of services.
 - Type and location of features of historical, archaeological, geological or ecological importance.
 - Sequence and method of demolition including details of specific pre-weakening.
 - Arrangements for protection of personnel and the public including exclusion of unauthorized persons.
 - Arrangements for control of site transport and traffic.
 - Proposed programme of work.

120 EXTENT OF DEMOLITION

- General: Subject to retention requirements specified elsewhere demolish structures down to inner leaf damp proof course.

DEMOLITION WORK

310 WORKMANSHIP

- Standard: Demolish structures in accordance with BS 6187.
- Operatives:
 - Appropriately skilled and experienced for the type of work.
 - Holding or in training to obtain relevant CITB Certificates of Competence.
- Site staff responsible for supervision and control of work: Experienced in the assessment of risks involved and methods of demolition to be used.

320 GAS OR VAPOUR RISKS

- Precautions: Prevent fire or explosion caused by gas or vapour.

330 DUST CONTROL

- General: Reduce airborne dust by periodically spraying demolition works with an appropriate wetting agent. Keep public roadways and footpaths clear of mud and debris.
- Lead dust: Submit method statement for control, containment and clean-up regimes.

340 HEALTH HAZARDS

- Precautions: Protect site operatives and general public from hazards associated with vibration, dangerous fumes and dust arising during the course of the Works.

350 ADJOINING PROPERTY

- Temporary support and protection: Provide. Maintain and alter as necessary as work progresses.
- Damage: Minimize. Promptly repair.
 - Leave no unnecessary or unstable projections.
 - Make good to ensure safety, stability, weather protection and security.
- Support to foundations: Do not disturb.
- Defects: Report when exposed or becoming apparent.

360 STRUCTURES TO BE RETAINED

- Parts which are to be kept in place: Protect.
- Extent of work: Cut away and strip out with care to reduce the amount of making good to a minimum.

370 PARTLY DEMOLISHED STRUCTURES

- General: Leave in a stable condition, with adequate temporary support at each stage to prevent risk of uncontrolled collapse. Keep safe outside working hours.
- Temporary works: Prevent debris from overloading.
- Unauthorised persons: Prevent access.

380 DANGEROUS OPENINGS

- General: Illuminate and protect. Keep safe outside working hours.

391 ASBESTOS CONTAINING MATERIALS

- Discovery: Give notice immediately of suspected asbestos containing materials discovered during demolition work. Avoid disturbing such materials.
- Methods for safe removal: Submit details and statutory risk assessments.

410 UNFORESEEN HAZARDS

- Unrecorded voids, tanks, chemicals, etc. discovered during demolition: Give notice.
- Methods for safe removal, filling, etc: Submit details.

MATERIALS ARISING

510 CONTRACTOR'S PROPERTY

- Components and materials arising from the demolition work: Property of the Contractor except where otherwise provided.
 - Remove from site as work proceeds where not to be reused or recycled for site use.

511 EMPLOYER'S PROPERTY

- Components and materials to remain the property of the Employer: Lights & Sockets.
- Protection:
 - Maintain until these items are removed by the Employer, reused in the Works or the end of the Contract.

520 RECYCLED MATERIALS

- Materials arising from demolition work: May be recycled or reused elsewhere in the project, subject to compliance with the appropriate specification.
- Evidence of compliance: Submit full details and supporting documentation.
- Verification: Allow adequate time in programme for verification of compliance.

C45 DAMP PROOF COURSE RENEWAL/ INSERTION

To be read with Preliminaries/ General conditions.

140 BEFORE DPC INSTALLATION

- Positions of dpcs not shown on drawings: Submit proposals.
- Internal finishes: Remove only sufficient to expose the proposed line of dpc.

- Fungal or beetle attack to timber sections: Report occurrences.

C46 CAVITY WALL TIE RENEWAL/ INSERTION

To be read with Preliminaries/ General conditions.

GENERAL REQUIREMENTS

105 SURVEY OF EXISTING CAVITY WALLS

- Timing: Before starting remedial work covered in this section.
- Purpose: To confirm nature and extent of remedial work to wall ties.
- Survey report: Submit, stating:
 - Form of construction, materials used and condition of walls.
 - Thicknesses of internal and external leaves.
 - Widths of cavities.
 - Nature and extent of remedial work including requirements for additional ties at, e.g. sloping verges, movement joints and openings.
 - Schedule of services, fixtures and finishes requiring removal to facilitate renewal of wall ties.
 - Any other information considered relevant.

PREPARATION/ INSTALLATION

310 INITIAL SITE TESTING OF PROOF LOADS FOR WALL TIES

- Timing: Before commencing wall tie installation.
- Tensile proof loads of wall tie fixings:
 - General: Do not test wall ties until they have been installed for the appropriate periods recommended by the wall tie manufacturer.
 - Locations: Submit proposals.
 - Testing: Give adequate notice.
 -
 - Test failures: Obtain instructions.
 - Completion of satisfactory testing: Submit results.

315 PROOF LOAD TESTING OF WALL TIES DURING INSTALLATION

- Timing: During installation and before making the external leaf connections.
- Tensile proof loads of wall tie fixings:
 - General: Do not test wall ties until they have been installed for the appropriate periods recommended by the wall tie manufacturer.
 - Testing: Give adequate notice.
 - Proof load test frequency (minimum):

Number of ties	Minimum test rate	Allowable failure rate of tested ties
The first 20	_____ %	_____ %
21-250	_____ %	_____ %
251-1000	_____ %	_____ %
Over 1000	_____ %	_____ %

Locations: As agreed with CA.

First sample set failure rate exceeds 10%: Repeat the proof test on a further sample set.

Combined failure rate of both sample sets exceeds 10%: Obtain instructions.

Ties that fail proof load test: Replace in suitably adjacent location and retest.

- Completion of satisfactory testing: Submit results.

330 INSTALLATION OF WALL TIES GENERALLY

- Masonry:
 - Stable at all times during wall tie installation.
 - Formation of holes: Minimize.
 - Cavities: Clear and free from debris.
 - Fixing holes: Clean.
- Wall ties:
 - Installation: Accurately and securely.
 - Drips: Centred on cavity.
 - Expansion anchor fixings: Set to the correct torque.
 - Bonded fixings: Thoroughly grouted.
- Facework: Keep clean.

340 POSITIONING OF WALL TIES

- Spacing of wall ties: 900 horizontally, 450mm vertically.
- Additional ties:
 - Reveals of unbonded openings and edges (including gables and movement joints): 150mm.
 - Cavities with insulation batts: N/A.

350 REMOVING MASONRY UNITS FOR REUSE

- Removal of units: In one piece. Clean and set aside for reuse.
- Units unsuitable for reuse: Obtain instructions.
- Adjacent masonry:
 - Joints: Do not damage or widen.
 - Old mortar: Remove.
 - Cavities: Keep clean.

355 REMOVING MASONRY UNITS

- Adjacent masonry:
 - Joints: Do not damage or widen.
 - Old mortar: Remove.
 - Cavities: Keep clean.

365 REMOVAL OF EXISTING WALL TIES FROM INTERNAL LEAF

- Wall ties: Remove carefully and completely.
- Internal leaf/ finishes: Minimize disturbance.

368 REMOVAL OF EXISTING WALL TIES FROM EXTERNAL LEAF

- Wall ties:
 - Flexible wire ties: Crop or bend down against face of internal leaf.
 - Rigid ties: Crop against face of internal leaf.
- Internal leaf/ finishes: Do not disturb.

COMPLETION

400 MAKING GOOD OF INSERTION/ INSPECTION HOLES IN EXTERNAL LEAF

- Mortar mixes: To approval.
 - Colour and texture: To match existing masonry units/ joints.
- Insertion/ Inspection holes: Clean and fully filled with repair mortar.
 - Finish: Neat and flush.

430 REPOINTING CRACKED JOINTS

- Extent of repointing: To joints with cracks wider than 1mm
- Joints:
 - Existing mortar: Remove carefully. Do not damage adjacent masonry or widen joints.
 - Recess to receive pointing: Neat and square, minimum depth twice joint thickness. Remove dust and debris.

- Mortar: As section Z21.
 - Mix: 1:3 , 1:4
- Repointing: Control suction. Fully fill joints with mortar.
 - Profile: Finish neatly to match existing adjacent joints.
- Facework: Keep clean.

440 DOCUMENTATION

- Submit:
 - Statement of quality control checks.
 - Guarantee certificate.

F10 BRICK/ BLOCK WALLING

05 FACING BRICKWORK

- Bricks: To BS 3921 or to BS EN 771-1
 - Manufacturer: salvaged / second hand
 - Product reference: for approval
- Mortar: As section Z21.
 - Mix: 1: 2.5 Hydraulic lime: sand
- Bond: English
- Joints: to match existing

36 CONCRETE COMMON BLOCKWORK

- Blocks: To BS EN 771-3.
 - Manufacturer: Tarmac
 - Product reference: Toplite 7
 - Configuration: solid.
 - Compressive strength: 7.3N/mm²
 - Thermal properties: 0.19W/m²K
 - Work sizes (length x width x height): 440 x 215 x 215
- Mortar: As section Z21.
 - Standard: 1:6

51 BASIC WORKMANSHIP

- Bond where not specified: Half lap stretcher.
- Mortar joints: Fill all vertical joints. Lay bricks, solid and cellular blocks on a full bed.
- Quoins and advance work: Rack back.
- Locations for equal levelling of cavity wall leaves:
 - Every course containing vertical twist type ties or other rigid ties.
 - Every third tie course for double triangle/ butterfly ties.
 - Courses in which lintels are to be bedded.
- Lift height (maximum): 1.2 m above any other part of work at any time.
- Daily lift height (maximum): 1.5 m for any one leaf.

55 FACEWORK

- Commencement of face work: Not less than 150 mm below finished level of adjoining ground or external works level.
- Brick/ block selection: Do not use units with damaged faces or arises.
- Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.
- Coursing: Evenly spaced using gauge rods. To produce satisfactory junctions and joints with built-in elements and components.

60 ALTERATIONS/ EXTENSIONS

- Coursing: Line up with existing work.
- Block bonding new walls to existing: Unless agreed otherwise cut pocket requirements as follows:
 - Width: Full thickness of new wall.
 - Depth (minimum): 100 mm.
 - Vertical spacing: As follows:
 - Brick to brick: 4 courses high at 8 course centres.

Block to block: Every other course.

- Pocket joints: Fully filled with mortar.
- New and existing face work in the same plane: Bonded together at every course to achieve continuity of bond and coursing.
- Support of existing work: Fully consolidate joint above inserted lintel or masonry with semidry mortar to support existing structure.

66 FIRE STOPPING

- Avoidance of fire and smoke penetration: Fit tightly between cavity barriers and masonry. Leave no gaps.

95 REPOINTING

- Preparation: Cut out joints to form a rectangular recess of 15-20 mm depth. Clean and dampen joints sufficiently to control suction.
- Joint profile: as existing
- Mortar: As section Z21.
 - Mix: 1: 2.5 hydraulic lime: sand

F30 ACCESSORIES/ SUNDRY ITEMS FOR BRICK/ BLOCK STONE WALLING

05 CAVITIES

- Concrete fill to base of cavity:
- Concrete generally: To BS EN 206-1 and BS 8500-2.
 - Designated concrete: GEN1 or Standard mix ST2 with high workability.
 - Extent: Maintain 75 mm between top of fill and external ground level and a minimum of 225 mm between top of fill and ground level dpc.
- Cleanliness: Keep cavity faces, ties and dpcs free from mortar and debris.

07 PERPEND JOINT WEEP HOLES

- Form: Open clear perpend joint.
- Locations: Through outer leaf, immediately above base of cavity, at cavity trays, stepped dpcs and over openings. 75 mm above top of cavity fill at base of cavity.
- Provision: At not greater than 1000 mm centres and not less than two over openings.

20 CAVITY WALL TIES

- Standard: to BS 1243
 - Type: stainless steel
- Sizes: 90mm cavity tie mounted as insulation retaining clips. As recommended by the manufacturer.

28 FIXING TIES IN MASONRY CAVITY WALLS

- Embedment in mortar beds (minimum): 50 mm.
- Placement: Sloping slightly downwards towards outer leaf without bending. Drip centred in the cavity and pointing downwards.
- Spacing: Staggered in alternate courses.
 - Horizontal centres: 900mm
 - Vertical centres: 450mm
- Provisional of additional ties: Within 150 mm of reveals of unbonded openings at not more than 300mm centres vertically.

56 PREFORMED CAVITY TRAYS

- Manufacturer: Cavity Trays of Yeovil
 - Product references and locations: Type J and Type P

68 SEALING DPCS

- Overlaps and junctions: Seal with as recommended by dpc manufacturer

F31 PRECAST CONCRETE SILLS/ LINTELS/ COPINGS/ FEATURES

TYPES OF COMPONENT

- 105 PRECAST Copings
- Concrete: Components manufacturer's 'proprietary' concrete.
 - Identity: to match existing
 - Conformity: To BS 8500-2 and the recommendations of BS 8500-1 Annex A4 for the specified exposure class.
 - Evidence: Submit third party certification from a UKAS accredited laboratory.
 - Exposure class: F2
 - Strength class (cylinder/ cube): as manufacture
 - Reinforced components: Submit proposals for type of reinforcement and cover.
 - Matching sample for finish to visible faces: match existing
 - Other requirements:
- 125 SUBSTITUTION OF PROPRIETARY CONCRETE FOR DESIGNATED CONCRETE
- Concrete: Component manufacturer's 'proprietary' concrete.
 - Substitution: Submit proposals for each substitution, including:
 - Identity of concrete: to be confirmed
 - Performance: Limiting values for w/c ratio, cement/ combination content or, alternatively, the Exposure class to BS 8500, to which concrete conforms.
 - Reinforcement: Type and cover.
 - Evidence of performance: Third party certification by body from a UKAS accredited laboratory.

GENERAL REQUIREMENTS

- 210 MOULDS
- Permissible fabrication and operating tolerances: Length 0 to +6 mm, other dimensions ± 3 mm.
- 220 CONCRETE GENERALLY
- Specification: To BS 8500-2 and BS EN 206-1.
 - Producer: Currently certified by a body accredited by UKAS to BS EN 45011 for product conformity certification of ready-mixed concrete.
 - Chloride class of concrete: Excluding SPRC: C 10.40
 - Using SRPC: C1 0.20.
 - Reinforced and heat cured: C1 0.10.
 - Prestressed: C1 0.10.
 - Admixtures containing calcium chloride: Not allowed.
- 250 REINFORCEMENT
- Carbon steel reinforcement: As appropriate to BS 4449, BS 4482 and BS 4483.
 - Cutting and bending: To BS 8666.
 - Galvanized reinforcement: Galvanized to BS EN ISO 1461 after cutting. Chromate treated.
 - Stainless steel reinforcement: To BS 6744.
 - Designation: 1.4301.
 - Cutting and bending: To BS 8666.
 - Non structural reinforcement: Include to resist shrinkage and handling stresses.
 - Bimetallic corrosion and staining: Prevent by appropriate selection and use of materials.
 - Condition at time of placement: Clean, free of corrosive pitting, loose materials and substances that adversely affect reinforcement, concrete, or bond between the two.
 - Fixing: Accurate and secure.
 - Method: Wire tying, approved steel clips or tack welding if permitted.

- Concrete cover: Maintain free of all tying wire or clips.

260 CASTING AND CURING

- Placing of concrete: Thoroughly compact.
- Protection against drying out: Methods and duration to BS EN 13369 clause 4.2.1.3.
- Immature components: Avoid movement, vibration, overloading, physical shock, rapid cooling and thermal shock.
- Delivery to site: Not until at least 14 days after casting.

FAIR FACED COMPONENTS

310 CONTROL SAMPLES

- Required samples: After finalization of design, one each of the following components: Copings
- Approval of appearance: Obtain before manufacture of remaining units.
- Identification and storage location: Clearly label and retain at factory for comparison with production units.

330 MIXES FOR VISIBLE FACED COMPONENTS

- Constituent materials and mix design for each finish type: To remain constant.
- Colour and appearance of each finish type: To remain constant.
- Aggregates: To BS EN 12620.
 - Origin: Single source for each finish type, having sufficient quantity for whole contract.

341 CONDITIONS FOR SEPARATE FACING AND BACKING MIXES

- Difference in cement content: Not greater than 80 kg/m³.
- Thickness of facing mix: 10 mm greater than maximum aggregate size, minimum 25 mm.
- Location of reinforcement: Minimum 20 mm away from the interface between mixes.
- Compaction of facing and backing mix: Carry out to create monolithic construction.

350 QUALITY OF FINISHES

- Appearance standard: As established by samples.

370 COVER ON VISIBLE FACES

- Spacers: Not permitted.
- Proposed method statement: Submit.

380 CONSISTENCY OF PRODUCTION METHODS

- Production methods: To remain consistent for each matching type of finish.
 - Finish appearance: To remain within the range of variation indicated by the samples submitted.
- Changes to production methods: If variations are proposed for components of the same finish, submit evidence that there will be no difference in appearance.

INSTALLATION

420 LAYING

- Mortar for bedding and jointing: As section Z21.
 - Type: Sand: cement
 - Mix: 3:1
 - Packing: If required use slate.
- Bedding components: On full bed of mortar
- Removal of marks, stains and extraneous mortar on visible faces: Rubbing not permitted.

430 SUPPORT OF EXISTING WORK OVER NEW LINTELS

- Joint above lintels: Fully fill and compact with semidry mortar.

440 ONE PIECE SILLS/ THRESHOLDS

- Bed joints: Leave clear of mortar except at end bearings and beneath masonry mullions.
- On completion: Point with mortar to match adjacent work.

G12 ISOLATED STRUCTURAL METAL MEMBERS

10 STEEL SECTIONS AND PLATE

- Section properties and dimensions: To BS 4-1, BS EN 10055, BS EN 10056 or BS EN 10210, as appropriate.
 - Steel: To BS EN 10025-2 or BS EN 10210-1, as appropriate.
 - Grade: S275JR
 - Surface condition: Free from heavy pitting and rust, burrs, sharp edges and flame cutting dross.
- Cuts and holes: Accurate and neat.
- Welding: Metal arc method to BS EN 1011-2.
 - Welded joints: Fully fused, with mechanical properties not less than those of the parent metal.
 - Site welding: Obtain approval.

20 SHOP PRIMING

- Preparation: To BS EN ISO 12944-4. Remove fins, burrs, sharp edges and weld spatter, clean out crevices
 - Surface finish: Manually cleaned to BS EN ISO 8501-1, grade St 2.
 - Prepared surfaces: Keep in a dry atmosphere and apply first coating without delay.
- Priming:
 - Primer: One coat zinc phosphate modified alkyd, minimum dry film thickness 40 micrometres.
 - Application: To BS EN ISO 12944-7.

35 BOLT ASSEMBLIES

- Size: as shown on the drawing
- Nuts and washers: Material grade and finish to suit bolts.
- Coating applied by manufacturer: galvanised

40 INSTALLATION

- Accuracy: Members positioned true to line and level using, if necessary, steel packs of sufficient area to allow full transfer of loads to bearing surfaces.
- Fixing: Use washers under bolt heads and nuts.
- Tapered washers: Provide under bolt heads and nuts bearing on sloping surfaces. Match taper to slope angle and align correctly.

G20 CARPENTRY/ TIMBER FRAMING/ FIRST FIXING

To be read with Preliminaries/ General conditions.

GENERAL

105 TIMBER PROCUREMENT

- Timber (including timber for wood based products): Obtained from well managed forests/ plantations in accordance with:
 - The laws governing forest management in the producer country or countries.
 - International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
- Documentation: Provide either:
 - Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied, or
 - Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.

150 STRENGTH GRADING OF TIMBER

- Grader: A company currently registered under a third party quality assurance scheme operated by a certification body approved by the UK Timber Grading Committee.

160 GRADING AND MARKING OF SOFTWOOD

- Timber of a target/ finished thickness less than 100 mm and not specified for wet exposure: Graded at an average moisture content not exceeding 20% with no reading being in excess of 24% and clearly marked as 'DRY' or 'KD' (kiln dried).
- Timber graded undried (green) and specified for installation at higher moisture contents: Clearly marked as 'WET' or 'GRN'.
- Structural timber members cut from large graded sections: Regraded to approval and marked accordingly.

WORKMANSHIP GENERALLY

401 CROSS SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD AND HARDWOOD

- Dimensions: Dimensions in this specification and shown on drawings are target sizes as defined in BS EN 336.
- Tolerances: The tolerance indicators (T1) and (T2) specify the maximum permitted deviations from target sizes as stated in BS EN 336, clause 4.3:
 - Tolerance class 1 (T1) for sawn surfaces.
 - Tolerance class 2 (T2) for further processed surfaces.

402 CROSS SECTION DIMENSIONS OF NONSTRUCTURAL SOFTWOOD

- Dimensions: Dimensions in this specification and shown on drawings are finished sizes.
- Maximum permitted deviations from finished sizes: As stated in BS EN 1313-1:
 - Clause 6 for sawn sections.
 - Clause NA.2 for further processed sections.

403 CROSS SECTION DIMENSIONS OF NONSTRUCTURAL HARDWOOD

- Dimensions: Dimensions in this specification and shown on drawings are finished sizes.
- Maximum permitted deviations from finished sizes: As stated in BS EN 1313-2:
 - Clause 6 for sawn sections.
 - Clause NA.3 for further processed sections.

420 WARPING OF TIMBER

- Bow, spring, twist and cup: Not greater than the limits set down in BS 4978 or BS EN 14081-1 for softwood, or BS 5756 for hardwood.

430 SELECTION AND USE OF TIMBER

- Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.
- Notches and holes: Position in relation to knots or other defects such that the strength of members will not be reduced.
- Scarf joints, finger joints and splice plates: Do not use without approval.

440 PROCESSING TREATED TIMBER

- Cutting and machining: Carry out as much as possible before treatment.
- Extensively processed timber: Retreat timber sawn lengthways, thickness, planed, ploughed, etc.
- Surfaces exposed by minor cutting/ drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.

450 MOISTURE CONTENT

- Moisture content of wood and wood based products at time of installation: Not more than:
 - Covered in generally unheated spaces: 24%.
 - Covered in generally heated spaces: 20%.

- Internal in continuously heated spaces: 20%.

510 PROTECTION

- Generally: Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing.
- Timber and components: Store under cover, clear of the ground and with good ventilation. Support on regularly spaced, level bearers on a dry, firm base. Open pile to ensure free movement of air through the stack.
- Trussed rafters: Keep vertical during handling and storage.

530 PAINTED FINISHES

- Structural timber to be painted: Primed as specified before delivery to site.

540 CLEAR FINISHES

- Structural timber to be clear finished: Keep clean and apply first coat of specified finish before delivery to site.

550 EXPOSED TIMBER

- Planed structural timber exposed to view in completed work: Prevent damage to and marking of surfaces and arrises.

JOINTING TIMBER

570 JOINTING/ FIXING GENERALLY

- Generally: Where not specified precisely, select methods of jointing and fixing and types, sizes and spacings of fasteners in compliance with section Z20.

580 FRAMING ANCHORS

- Manufacturer: _____ .
- Product reference: _____ .
- Material/ finish: _____ .
- Fasteners: Galvanized or sherardized square twist nails.
- Size: Not less than size recommended by anchor manufacturer.
- Fixing: Secure using not less than the number of nails recommended by anchor manufacturer.

615 BOLT/ SCREW ASSEMBLIES _____

- Designation: _____ .
- Size: _____ .
- Coating applied by manufacturer: _____ .
- Nuts and washers: Material grade and finish to suit bolts
- Washer dimensions: Diameter/ side length of washers in contact with timber faces to be minimum 3 times bolt diameter, with a thickness not less than 0.25 times bolt diameter.

630 BOLTED JOINTS

- Bolt spacings (minimum): To BS 5268-2, table 81.
- Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2 mm larger.
- Washers: Placed under bolt heads and nuts that would otherwise bear directly on timber. Use spring washers in locations which will be hidden or inaccessible in the completed building.
- Bolt tightening: So that washers just bite the surface of the timber. Ensure that at least one complete thread protrudes from the nut.
- Checking: At agreed regular intervals up to Completion. Tighten as necessary.

670 ANTICORROSION FINISHES FOR FASTENERS

- Galvanizing: To BS 7371-6, with internal threads tapped and lightly oiled following treatment.
- Sherardizing: To BS 7371-8, Class 1.
- Zinc plating: To BS EN ISO 4042 and passivated.

M60 PAINTING/ CLEAR FINISHING

30 PREPARATION GENERALLY

- Standard: In accordance with BS 6150.
- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment, and reoccupation, and obtain approval before commencing work.
- Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
- Substrates: Sufficiently dry in depth to suit coating.
- Efflorescence salts, dirt, grease and oil: Remove.
- Surface irregularities: Provide smooth finish.
- Organic growths and infected coatings:
 - Remove with assistance of biocidal solution.
 - Apply residual effect biocidal solution to inhibit regrowth.
- Joints, cracks, holes and other depressions: Fill with stoppers/ fillers. Provide smooth finish.
- Dust, particles and residues from preparation: Remove and dispose of safely.
- Doors, opening windows and other moving parts:
 - Ease, if necessary, before coating.
 - Prime resulting bare areas.

32 PREVIOUSLY COATED SURFACES GENERALLY

- Preparation: In accordance with BS 6150, clause 11.5.
- Contaminated or hazardous surfaces: Give notice of:
 - Coatings suspected of containing lead.
 - Substrates suspected of containing asbestos.
 - Significant rot, corrosion or other degradation of substrates.
- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
- Removing coatings: Do not damage substrate and adjacent surfaces or adversely affect subsequent coatings.
- Loose, flaking or otherwise defective areas: Carefully remove to a firm edge.
- Alkali affected coatings: Completely remove.
- Retained coatings:
 - Thoroughly clean.
 - Gloss coated surfaces: Provide key.
- Partly removed coatings: Apply additional preparatory coats.
- Completely stripped surfaces: Prepare as for uncoated surfaces.

35 FIXTURES AND FITTINGS

- Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment, and reoccupation, and obtain approval before commencing work.
- Removal: Before commencing work remove: existing fixtures and fittings
- Replacement: Refurbish as necessary, refit when coating is dry.

37 WOOD PREPARATION

- General: Provide smooth, even finish with lightly rounded arrises.
- Degraded or weathered surface wood: Take back surface to provide suitable substrate.
- Degraded substrate wood: Repair with sound material of same species.
- Heads of fasteners: Countersink sufficient to hold stoppers/ fillers.
- Resinous areas and knots: Apply two coats of knotting.
- Defective primer: Take back to bare wood and reprime.

39 STEEL PREPARATION

- Corrosion and loose scale: Take back to bare metal.
- Residual rust: Treat with a proprietary removal solution.
- Bare metal: Apply primer as soon as possible.

41 MASONRY AND RENDERING PREPARATION

- Loose and flaking material: Remove.

43 PLASTER PREPARATION

- Nibs, trowel marks and plaster splashes: Scrape off.
- Overtrowelled 'polished' areas: Provide suitable key.

45 PREVIOUSLY PAINTED WINDOW FRAMES

- Paint encroaching beyond glass sight line: Remove.
- Loose and defective putty: Remove.
- Putty cavities and junctions between previously painted surfaces and glass: Clean thoroughly.
- Finishing:
 - Patch prime, reputty, as necessary and allow to harden.
 - Seal and coat as soon as sufficiently hard.

50 EXTERNAL POINTING TO EXISTING FRAMES

- Defective sealant pointing: Remove.
- Joint depth: Approximately half joint width; adjust with backing strip if necessary.
- Sealant:
 - Manufacturer: Dow corning
 - Product reference: to suit
 - Preparation and application: As section Z22.

55 EXISTING GUTTERS

- Dirt and debris: Remove from inside of gutters.
- Defective joints: Clean and seal with suitable jointing material.
- Suspected hazardous materials: submit method statement.

61 COATING GENERALLY

- Application: In accordance with BS 6150, clause 9.
- Conditions: Maintain suitable temperature, humidity and air quality.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing: Not permitted unless recommended by manufacturer.
- Priming coats: Apply as soon as possible on same day as preparation is completed.
- Finish:
 - Even, smooth and of uniform colour.
 - Free from brush marks, sags, runs and other defects.
 - Cut in neatly.
- Doors, opening windows and other moving parts: Ease before coating and between coats.

65 CONCEALED JOINERY SURFACES

- General: After priming, apply additional coatings to surfaces that will be concealed when component is fixed in place.

66 CONCEALED METAL SURFACES

- General: Apply additional coatings to surfaces that will be concealed when component is fixed in place.

68 STAINING WOOD

- Primer: Apply if recommended by stain manufacturer.
- Application: Apply in flowing coats and brush out excess stain to produce uniform appearance.

70 EXTERNAL DOORS

- Bottom edges: Prime and coat before hanging.

75 BEAD GLAZING TO COATED WOOD

- Before glazing: Apply first two coats to rebates and beads.

80 PUTTY GLAZING

- Setting: Allow putty to set for seven days.
- Sealing:
 - Within a further 14 days, seal with an oil based primer.
 - Fully protect putty with coating system as soon as it is sufficiently hard.
 - Extend finishing coats on to glass up to sight line.

Q55 External decks and boardwalks

GENERAL

Roof Terrace decking will comprise of Millboard low-slip decking fixed with Durafix 45mm Stainless Steel screws to a DuoSpan aluminium and plastic subframe. Boarding to be spaced with a 4mm drainage gap between the boards and a 1mm gap at the ends, fixed in accordance with Millboard decking installation guide.

The Subframe comprise of DuoSpan joists laid at 400mm centres (residential usage – 2,5kN/sqm) or 300mm centres (commercial usage – 5kN/sqm) made into a framework fixed together DuoSpan brackets - DuoSpan 90° Angle brackets, DuoSpan straight connectors & DuoSpan flexible brackets. Installed in accordance with Millboard's DuoSpan install guides.

The DuoSpan 51mm joists will need to be supported by DuoLift joist supports 600mm centres (commercial), DuoLift Acoustic Separation pads need to be used when installing over a waterproofed roof membrane.

The DuoSpan 99mm joists will need to be supported by DuoLift joist supports every 1800mm centres (residential) or 1200mm centres (commercial), DuoLift Acoustic Separation pads need to be used when installing over a waterproofed roof membrane.

110 ROOF TERRACE DECK:

- Base preparation: Roof built up according to drawings with sacrificial fleece layer if required.
- Structure, other than surfacing: DuoSpan framework
 - Fasteners: DuoSpan brackets including fixings
 - Accessories: DuoSpan joist inserts
- Post setting: Not applicable unless stated in the drawings.
- Subframing: DuoSpan
- Surfacing: Millboard Low maintenance, Low slip decking.
 - Method of attachment: Durafix stainless steel screws 4.5x45mm.
- Guarding: See architects drawings.
- Accessories: See drawings for specified details. (This could include flexible edge profiles, Bullnose Boards, fascia boards, DuoSpan fascia supports or Lasta-Grip decking for ramps or steps.)

SYSTEM PERFORMANCE

210 DESIGN Pedestrian Use Only

- Structure and associated features: Structurally designed DuoSpan Subframe to Eurocodes 1, which varies in build-up according to project requirements..
- Proposals: Submit drawings, technical information, calculations and manufacturers' Literature.
- Performance criteria: Pedestrian Use Only.

220 MAXIMUM PERMITTED LOADS

- Dead loads: 2.5kN/m² (residential) 5 kN/m² (commercial).
- Imposed loads:
 - Activity/ Occupancy loading: Pedestrian Traffic.
 - Point loads: 2kN (residential) 3.6 kN (commercial)..

PRODUCTS

370 ALUMINIUM & PLASTIC SUBFRAME SECTIONS

- Supplier: The Millboard Company Ltd, Castle Court, Bodmin Road, Coventry, CV2 5DB. 024 7658 7995. projects@millboard.co.uk
- Product reference: DuoSpan 51mm Joists, DuoSpan 99mm Joists
- Colour: Mill finish .
- Features: Designed to BS EN 1991-1-1:2002, allows Durafix fixings at any angle, cathodic barrier coated fixings, combine with DuoSpan fascia supports for curved designs

380 RESIN MINERAL COMPOSITE DECK BOARDS (RMC)

- Manufacturer: The Millboard Company Ltd, Castle Court, Bodmin Road, Coventry, CV2 5DB. 024 7658 7995. projects@millboard.co.uk
- Product reference: Enhanced Grain,
 - Material: Polyurethane Resin Mix.
- Treatment: None Required.
- Profile: 176x32x3600mm (Enhanced Grain)
- Finished size: 176x32x3600mm (Enhanced Grain)
- Finish: **Limed Oak**
- Features: 100% wood free, hand moulded, elastomeric Lastane finish, 2K surface coating, no ventilation needed, lost-head fixings

395 ROOF TERRACE SUBFRAME SUPPORTS

- Supplier: The Millboard Company Ltd, Castle Court, Bodmin Road, Coventry, CV2 5DB. 024 7658 7995. projects@millboard.co.uk
- Product reference: DuoLift subframe supports
- Support Sizes:
 - DuoLift 15-60mm Joist cradle
 - DuoLift 20mm Self-Levelling Joint
 - DuoLift 45mm Riser
 - DuoLift 45mm Foot
 - DuoLift 3mm Acoustic separation pad
- Features: Flexibility in support height ranges, ¼ of a turn equals 1mm height adjustment, 5mm markings on side of the cradle, components twist lock in place, self-levelling up to 5°

FABRICATION

510 FABRICATION GENERALLY

- Design: Complete the detailed design and obtain approval prior to commencing fabrication.
- Shop drawings: Submit.
- Structural calculations: Submit.
- Frameworks: As per manufacturers install guides
- Contact between dissimilar metals: Avoid.
- Fixings: Fully bolt together. Tighten bolts.
- Temporary support: Do not subject members to non-design loadings.

EXECUTION

610 LOADING

- Site activities: Restrict, to ensure that design loads are not exceeded, or submit proposals for temporary supports.

670 INSTALLATION OF SURFACING

- Heading joints: Kept to a minimum, and formed only as cut and squared butt joints situated over joists.
- Length: Each board must span not less than two bays between joists with joints in adjacent boards staggered.
- Gaps between boards: 4mm. 1mm at the ends.

- 2 Screws per joist/baton crossover, screws sunk 5mm below the top of the board

Z21 MORTARS

10 MORTAR MIXES

- Specification: Proportions and additional requirements for mortar materials are specified elsewhere.

20 SAND FOR SITE MADE CEMENT GAUGED MASONRY MORTARS

- Standard: To BS EN 13139.
- Grading: 0/2 (FP or MP).
 - Fines content where the proportion of sand is specified as a range (e.g. 1:1: 5-6):
Lower proportion of sand: Use category 3 fines.
Higher proportion of sand: Use category 2 fines.
- Sand for face work mortar: Maintain consistent colour and texture. Obtain from one source.

25 SAND FOR LIME: SAND MASONRY MORTARS

- Type: Sharp, well graded.
- Quality, sampling and testing: To BS EN 13139.
- Grading/ Source: As specified elsewhere.

30 READY-MIXED LIME: SAND FOR CEMENT GAUGED MASONRY MORTARS

- Standard: To BS EN 998-2.
- Lime: Nonhydraulic to BS EN 459-1.
 - Type: CL 90S.
- Pigments for coloured mortars: To BS EN 12878.

40 CEMENTS FOR MORTARS

- Cement: To BS EN 197-1 and CE marked.
 - Types: Portland cement, CEM I.
Portland limestone cement, CEM II/A-LL.
Portland slag cement, CEM II/B-S.
Portland fly ash cement, CEM II/B-V.
 - Strength class: 32.5, 42.5 or 52.5.
- White cement: To BS EN 197-1 and CE marked.
 - Type: Portland cement, CEM I.
 - Strength class: 52.5.
- Sulphate resisting Portland cement:
 - Types: To BS 4027 and Kite marked.
To BS EN 197-1 fly ash cement, CEM II/B-V and CE marked.
 - Strength class: 32.5, 42.5 or 52.5.
- Masonry cement: To BS EN 413-1 and CE marked.
 - Class: MC 12.5.

50 ADMIXTURES FOR SITE MADE MORTARS

- Air entraining (plasticizing) admixtures: To BS EN 934-3 and compatible with other mortar constituents.
- Other admixtures: Submit proposals.
- Prohibited admixtures: Calcium chloride, ethylene glycol and any admixture containing calcium chloride.

60 MAKING MORTARS GENERALLY

- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mix proportions: Based on dry sand. Allow for bulking of damp sand.
- Mixing: Mix materials thoroughly to uniform consistency, free from lumps.
 - Mortars containing air entraining admixtures: Mix mechanically. Do not over mix.
- Contamination: Prevent intermixing with other materials.

70 MAKING HYDRAULIC LIME: SAND MORTARS

- Mixing hydrated hydraulic lime: sand: Follow the lime manufacturer's recommendations for each stage of the mix.
- Water quantity: Only sufficient to produce a workable mix.

Z22 SEALANTS PRODUCTS

31 JOINTS

- Primer, backing strip, bond breaker: Types recommended by sealant manufacturer.

EXECUTION

61 SUITABILITY OF JOINTS

- Presealing checks:
 - Joint dimensions: Within limits specified for the sealant.
 - Substrate quality: Surfaces regular, undamaged and stable.
- Joints not fit to receive sealant: submit proposals for rectification

62 PREPARING JOINTS

- Surfaces to which sealant must adhere:
 - Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.
 - Clean using materials and methods recommended by sealant manufacturer.
- Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.
- Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.
- Protection: Keep joints clean and protect from damage until sealant is applied.

63 APPLYING SEALANTS

- Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.
- Environmental conditions: Do not dry or raise temperature of joints by heating.
- Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.
- Sealant profiles:
 - Butt and lap joints: Slightly concave.
 - Fillet joints: Flat or slightly convex.
- Protection: Protect finished joints from contamination or damage until sealant has cured.

SECTION D

Particular Specification

	<u>CONTENTS</u>		
D1.0	GENERALLY		
D2.0	SITE SET UP		
D3.0	SCAFFOLDING		
D4.0	GUARD RAILING		
D5.0	COPINGS		
D6.0	DECKING		
D7.0	BRICKWORK / DPC		
D8.0	FELT ROOFING		
D9.0	LEADWORK		
D10.0	LANDING TO FRENCH DOORS		
D11.0	UPGRADE METAL FIRE ESCAPE STAIRS		
D12.0	ELECTRICAL & MECHANICAL WORKS		
D13.0	DECORATION & MISCELLANEOUS WORKS		
D14.0	ATTENDANCE		
D15.0	DAYWORKS		

D1.0	GENERALLY	
D1.1	The following pricing points are to include for all works identified in the specification and on the drawings. The Contractor and all sub-contractors need to be aware that the use of non-historic materials will not be permitted and to ensure lime based mortar and renders are employed at all times unless stated specifically otherwise.	0.00
D1.2	<i>Outline of Works</i> The works involve the partial rebuilding of parapets to rectify damp issues, replacement decking, upgrade to metal staircase and top landing.	0.00
D1.3	<i>Asbestos</i> The Contractor must take care at all times when undertaking these works. Stop work immediately and inform the CA should any material be exposed, uncovered, or identified which is suspected of containing asbestos. A refurbishment survey will need to be undertaken prior to works commencing on site. Allow provisional sum of £1,000.00 for asbestos removal works. (Potential for ACM damp proof course)	1000.00
D1.4	<i>Tender Drawings</i> The following Schedule of Works is to be read in conjunction with the tender drawings contained within appendix A	0.00
D1.5	<i>Pricing</i> The Contractor will be expected to produce a priced Schedule of Works with their tender submission whereby each item of work should be individually costed for the Employer's review.	0.00
D1.6	An e-mailed Schedule of Works can be issued on request should the Contractor wish to use the document to supply their breakdown of costs.	0.00
D1.7	<i>Programme</i> A detailed programme will need to be prepared and submitted prior to works commencing for approval by the CA.	0.00
D1.8	<i>Site Foreman</i> The Contractor must include for providing a full time experienced site foreman for the full duration of the project. The site foreman must hold a minimum qualification of CSCS (Construction Skills Certificate Scheme) GOLD Card Supervisor standard for supervision and is to be on site for all works. For out of hours working, a fully briefed GOLD card skilled worker or supervisor must be in charge on site.	0.00
D1.9	<i>Contract</i> See main Preliminaries. The Contractor should price for standard preamble provisions here.	0.00
D1.10	<i>Workmanship, Quality and Compliance with Regulations</i>	

	The works are to be carried out in accordance with all appropriate and relevant Codes of Practice, in a workmanlike manner in accordance with the requirements contained in this specification and to the complete satisfaction of the CA.	0.00
D1.11	All products, materials and proprietary systems shall be used, handled and installed in accordance with the manufacturer's recommendations and their technical details shall be obtained and used for guidance.	0.00
D1.12	Should the Contractor wish to use alternative products to those specified they must obtain approval for their use from the CA. Such products must be at least equal to those specified.	0.00
D1.13	All works shall be carried out to a high-quality standard and all operatives shall be advised of the high quality of standard and finish which will be required.	0.00
D1.14	Any works which do not achieve the required standard shall be carried out again in the Contractors own time and at their own expense.	0.00
D2.0	SITE SET UP	
D2.1	<p><i>Site Compound</i></p> <p>The Contractor's compound shall utilise a section of the Town Hall Car Park. It is anticipated this will consist of 3 parking spaces for contractor's vehicles and space for a skip and external storage space all within site area on the block plan</p>	0.00
D2.2	The site compound shall be maintained during the contract and upon completion all items shall be removed from site and the area left exactly in the same state as before the contract . All damaged surfaces, concrete, tarmac and paved areas shall be replaced by the Contractor to the satisfaction of the CA at the end of the contract at no cost to the Employer.	0.00
D2.3	The Contractor shall ensure that all operatives contain themselves within the site compound and works areas and do not enter onto neighbouring land unless for purposes required by the contract works. Operatives shall not explore the grounds and buildings and anyone found wandering from the site without contractual reason will be requested to leave immediately.	0.00
D2.4	<p><i>Health and Safety Signage</i></p> <p>Provide comprehensive and thorough health and safety signs to the site, in particular, in and around the works areas and site compound.</p>	0.00
D2.5	The Contractor shall provide as part of their health and safety plan details of the proposed signs for agreement with the CA prior to starting on site.	0.00
D2.6	<p><i>Site Welfare Facilities</i></p> <p>The Town Hall are able to provide welfare facilities to comply with Schedule 2 of the 2015 CDM regulations, i.e.</p> <p>Sanitary conveniences</p> <p>Washing facilities</p> <p>Drinking water</p>	0.00

	Facilities for rest	
D2.7	The Contractor shall allow for all necessary PPE and site warning signage and Heras fencing to secure the site	0.00
D2.8	If required, adjustments and alterations to the layout of the Contractor's compound shall be agreed at the pre-contract meeting.	0.00
D2.9	<i>Advertisement</i> The Contractor shall not display any advertisement on the site other than the firm's name board and contact details; neither shall he permit any other advertisements to be displayed without the written authority of the CA.	0.00
D2.10	<i>Debris</i> The Contractor is to allow for the removal from site of all debris and surplus materials that have arisen from the works.	0.00
D2.11	All debris is to be removed from the site each day and placed in skips which are to be situated within site compound and include for all necessary skip licences/applications and lighting as required.	0.00
D2.12	All debris must be removed regularly and shall not be left to build-up.	0.00
D2.13	All skips shall be provided with nets to avoid debris being blown around during windy weather.	0.00
D2.14	<i>Protection Generally</i> Protection shall be given to all parts of the building and surrounding areas i.e. paths and roadways etc (during deliveries). The Contractor is to reinstate all damage occurring during the course of the contract at his own time and expense. Include for protection of 4no circular glass rooflights to the east and north east lower roofs to prevent damage from falling debris/materials Include protection internal of all floor areas of the Holmes Chamber before undertaking internal redecoration works	0.00
D2.15	<i>Manning</i> The Contractor will maintain adequate staffing levels and shall proceed diligently and expeditiously with the work. Include for all necessary banksmen for the movement of any plant or materials to and from the site compound to the site working area.	0.00
D2.16	The Contractor will be responsible for any delays arising out of their failure to inadequately resource the project.	0.00
D2.17	<i>Out of Hours Working</i> If deemed necessary, out of hours working will be agreed with the Employer and CA at the pre-contract meeting and on a week-by-week basis, with reasonable notice, depending on the programme of works.	0.00
D2.18	<i>Electrical Appliances</i>	

	Only 110V rated and cordless power-pack tools are permitted. It is assumed that there is no local power available for the site compound or site works area.	0.00
D2.19	<p><i>Meetings and Records</i></p> <p>The Contractor's representative and foreman will be required to attend site meetings when required by the CA and will be required to bring a progress report, records of sub-contractors and men employed. The Contractor is to submit to the CA weekly records of men employed for certification and signature.</p>	0.00
D2.20	<p><i>Programme</i></p> <p>The Contractor is to submit within 5 days of being appointed as the successful Contractor, a programme to indicate duration of activities and levels of manning.</p>	0.00
D2.21	<p><i>COSHH Regulations</i></p> <p>The Contractor is to comply with Control of Substances Hazardous to Health Regulations (COSHH) 2002. All relevant information relating to hazard assessment to be submitted on request.</p>	0.00
D2.22	<p><i>Extent of works & Contractor's Liaison</i></p> <p>The Contractor shall allow for liaison with all parties as required for the works which shall include the Employer and their representatives, all Contractors, whether specialist, domestic sub-contractors or those employed directly by the Employer, utilities companies and other suppliers involved in the works.</p>	0.00
D2.23	<p><i>Samples & Materials Selection</i></p> <p>The Contractor shall be required to obtain samples of certain materials and items which will require selection by the Client. Colour cards and samples etc shall be used for the 'initial selection' process and once items have been 'short-listed' larger samples and/or pieces will be required for presentation to the Client for final selection.</p>	0.00
D2.24	A sample panel of all mortar mixes must be provided for agreement prior to proceeding with areas of repointing and new masonry work.	0.00
D2.25	<p><i>Parking</i></p> <p>There is limited parking available, and the contractor must consider the implications for parking and ensure the road is not blocked and consider local residents at all times. Be aware of the width restrictions to the car park (3.5m) and also the location of the footpath. Ensure access to no 1 Town Hall and 3 and 5 Maltravers street are not restricted by contractors parking</p>	0.00
D3.0	SCAFFOLDING	
D3.1	Allow for the provision of scaffold guardrail externally to the perimeter of the roof terrace on all four elevations to be placed at ground level and off adjoining roof areas with full protection to all standard and tie back and restrain.	0.00
D3.2	Provide scaffold platforms to gain safe access to the west and east windows to enable opening up of brickwork above window heads and for external redecoration.	0.00
D3.3	All tubular scaffolding is to fully comply with the Work at Height Restrictions 2005, NASC TG 20:21 Good Practice Guidance for Tube and Fitting Scaffold. See Appendix C for further guidance. Ensure compliance sheets are issued prior to the erection of any scaffolding.	0.00

D3.4	Include for all necessary adaptation and alteration of scaffolding to facilitate the works.	0.00
D4.0	GUARDRAILING	
D4.1	Allow for the careful unbolting of the existing timber 75 x 100mm rebated capping rail (bolted on underside) and for reinstatement on completion of the works with new bolts/coachscrews	0.00
D4.2	The metal guard railing is made up of 31no posts and was originally built and installed in 9 sections based of the corner units and 4 x 4m straight runs. Allow for cutting off bolts and deconstruction of the guardrails and cutting where required	0.00
D4.3	Upon completion of rebuilding work, allow for refitment of guard railing and reweld all cut joints, rebolt with new countersunk SS bolts and refit uprights to be bolted within 3 no rawlplug expanding bolts specification to match existing.	0.00
D4.4	Refit previously removed timber handrail with new SS coachscrews	0.00
D4.5	See Section 13.0 for decoration works for guard railing.	0.00
D5.0	COPINGS	
D5.1	Allow for the careful removal and storage of good level of all copings to the parapets of the terrace.	0.00
D5.2	Inspect and report back on defects to copings and number broken / defects.	0.00
D5.3	Allow for the supply of 5 no new concrete copings to match the existing for size, finish, texture, overhangs and drips. New copings to be installed to north parapet or east parapet while weathered, salvaged copings must be installed to west and south elevations.	0.00
D5.4	On completion of repairs to parapet, install new cavity trays Type J DPC support and closer to be bed onto top of wall installed as manufacturer's instructions.	0.00
D5.5	Copings and coping joints to be bedded and pointed using 3:1 sand:cement and finished with rubbing iron.	0.00
D5.6	To corners and midway along each elevation, allow for formation of movement joint using DOW corning 790 silicon Building Sealant as per manufacturer's data sheet. Colour to match main brickwork, samples to be prepared (sandstone or limestone).	0.00
D5.7	Allow for temporary weathering of cavity when copings are removed and during opening up works to the parapet.	0.00
D6.0	DECKING	

D6.1	To suit programme of works, dispose of existing Millboard decking to include existing decking boards and timber 125 x 45mm softwood subtimbers at 1200mm centres, 150 x 50mm softwoods joists at 400mm centres. Remove and dispose of all paving slabs to roof. Note centrally there is a redundant raised rooflight approximate size 1.5m x 2.4m which finishes approximately 60mm below underside of decking boards. The mineral felt finish extends up and over this infilled rooflight.	0.00
D6.2	Thoroughly sweep down roof and remove all debris, dirt, verdigris etc. and wash down. Inspect and report any defects in the mineral felt overlay roofing system to the CA. Note below this there is the original asphalt roof. Allow the provisional sum of £1000 for repairs to the roof finish	1000.00
D6.3	Provide temporary plywood protection to roof finish.	0.00
D6.4	Include for removal and disposal of decking steps, supporting framework and decking and timber battens above asphalt roof in front of French doors.	0.00
D6.5	<p>To suit programme of work, supply and install a complete Millboard system of decking and joisting as follows:</p> <p>Limed oak 32mm x 176mm enhanced grain Millboard boards with 4mm gap between boards and 10mm gap at abutments.</p> <p>Duospan aluminium joists at 300mm centres.</p> <p>Duolift aluminium joists at 1200mm centres.</p> <p>Duolift adjustable pedestals to beams at 900mm centres set to maintain 360mm finish above roof finish</p> <p>All works MUST be undertaken in strict accordance with Millboard Product specificatoin document and Installation guidance (see Appendix A) ensuring all boards are stored as their recommendations.</p> <p>Ensure correct gaps are maintained namely min 4mm gap between boards, 50mm maximujm overhangs, 1mm gaps to butt joints, 10mm gap to abutments. All screws to be Durafix deck screws 4.5 x 45mm with spray lubricant applied and finish 5-8mm below the surface using the angled side fixing guide. Ensure min 20mm supooort at board ends with slight back cut provided.</p> <p>Check all boards are level and pack as required to take into consideration any deviation in thickness.</p> <p>All mitred corners must be glued together using gel PU glue.</p> <p>On completion register the 12 year commercial warranty (material only) with Millboard.</p>	0.00
D6.6	Include for all necessary Durafix stainless steel screws, cradle sets, self levelling joist sets, Duolift risers, feet, acoustic separation pads, joist insets, span straight connector kits, hold down clips, multispacers, touch up paint to complete the full installation as per Millboard installation guide.	0.00
D6.7	Allow for formation of steps from decking area up to landing in front of French doors using PlastPro Posts and joists. Include for bullnose boards to form 4 no steps as per drawing TE02	0.00

D6.8	To four number nosings, allow for highlighting of nosings using different coloured bullnose board	0.00
D6.9	Provide extra over cost for installation by Millboard Approved Installers, such as All on Deck , (Horley) tel 01342 841500 or other approved installer. Please note the 12 year warranty from Millboard only extends to the materials used and is NOT dependant on installation by an approved installer. DO NOT CARRY THIS FIGURE FORWARD JUST INCLUDE THE FIGURE HERE 	
D6.10	Ensure CA undertakes an inspection of all supporting beams, joists, BEFORE decking is installed and is signed off accordingly.	0.00
D7.00	BRICKWORK / DPC	
D7.1	Systematically, commencing at the top, take down inner course of brickwork by 8 courses, down to existing DPC / tray and salvage all brickwork working around on an elevation by elevation basis and in tandem with rebuilding of the inner roof	0.00
D7.2	Allow for the cleaning up of all salvaged brickwork for re-use and stack ready for re-use.	0.00
D7.3	The CA expects this work to be undertaken carefully and methodically using diamond angle grinders and hand finishes to remove bricks and clean up. The mortar is a mix of sand:cement and some areas of lime mortar.	0.00
D7.4	Include the provisional sum of £2,500. for the supply of second-hand imperial cream / yellow gault bricks. Samples to be agreed with the CA	2500.00
D7.5	Remove and dispose of existing bitumen flexible cavity trays (subject to asbestos sample testing) and some areas of lead tray (south west corner and west elevation) remove existing lead flashing below existing tray. Cut back if built into outer leaf.	0.00
D7.6	Remove all accessible debris to cavity and inspect and report back on visible cavities.	0.00
D7.7	Allow for the bending back / cutting off of existing wall ties to the remaining outer leaf (carefully, to ensure the outer leaf is not destabilised). Assume a total number of 80 number ties.	0.00
D7.8	As work progresses in stages with the rebuilding, allow for the installation of 90 number new remedial wall ties either the Heli-tie or Kemfix ties. This work must be undertaken carefully and consider the remaining stability of the outer leaf during this work. Work systematically around the perimeter to avoid destabilising the outer leaf.	0.00
D7.9	A minimum of 150mm above finished deck level, build in new Cavity Trays Type P cavity 2.4m long as manufacturer's instructions. Provide preformed internal angles for 4 no corners. Ensure all sections overlap a minimum of 150mm and provide Code 4 lead flashing, tucked in under tray to external over roof upstand.	0.00

D7.10	Note covered section of southern wall. Allow for the cutting into shorter lengths to suit the curvature of the wall with more overlaps.	0.00
D7.11	Install 12 no 215 x 65mm air bricks to inner leaf of brick parapets, 3 to each elevation.	0.00
D7.12	Open up 6 no random bricks, (3 per window) above the west and east elevation windows to facilitate inspection of the lead trays by CA and making good on completion.	0.00
D7.13	Allow PV sum of £1,500. for remedial works to lead trays	1500.00
D8.0	FELT ROOFING	
D8.1	The existing roof finish is an elastomeric mineral felt finish which appears to be in good condition where inspected.	0.00
D8.2	Below each decking pedestal (900mm centres on beams at 1200 centres) provide a 300 x 300mm protection pad cut from SBS elastomeric cap sheet (such as Bauder K4E cap sheet) cut to size and laid loose mineral face to mineral face	0.00
D8.3	To perimeter of roof, supply and install Bauder K4E self adhesive capsheet to dress into existing mineral felt by 300mm and dress up existing upstand and bond to new 12mm WBP plywood upstand to brickwork up to underside of new Type P Cavity trays and under lead cover flashing. Plywood to be fixed using countersunk screws and plugs every 600mm horizontally and 400mm vertically to extend from top of existing asphalt upstand to finish under lead flashing and below Type P tray downstand	0.00
D9.0	LEADWORK	
D9.1	Cut back and remove all existing lead cover flashings to the original parapets as brickwork inner leaf is removed.	0.00
D9.2	Supply and install new code 4 lead in maximum 1500mm lengths and 150mm overlaps and tucked in 30mm under Type P cavity tray and dress neatly over new felt and plywood upstand.	0.00
D9.3	Finish all lead with patination oil	0.00
D10.0	LANDING TO FRENCH DOORS	
D10.1	The existing millboard decking boards were screwed through 15mm timber battens and also penetrated into areas of asphalt roof. Cut off lower 150mm of centre handrail support post and remove bolted rusted plate to base of handrail post by cutting out fixings	0.00

D10.2	Fabricate 10mm plate 250 x 250mm with centre post galvanised and decorated black to replace existing plate and drill out and fix in place with countersunk M8/26mm zinc plated bolts 80mm long through asphalt roof into concrete deck. Take care and check thickness of slab before drilling. Bed in external frame sealant and seal all edges. Note plate will be exposed when landing GRP plate is fitted so this must be a neat finish. Refix original handrail square post by cutting back and welding to new post and treat welds with rust treatment.	0.00
D10.3	In conjunction with construction of new steps allow for the supply, trimming and fitment of new SUREGRIP 6mm GRP anti slip panel all as a single panel sized to suit the size of the landing to be bonded to the existing asphalt roof using Suregrip two part moisture resistant adhesive fully bedded via serrated trowl. Trim landing panel around two outer handrail posts. Ensure panel is bedded to finish flush with new panel to metal staircase top landing.	0.00
D10.4	Provide contrasting GRP anti slip nosing to edge of landing panel on top of millboard steps down to make decking area.	0.00
D11.0	UPGRADE METAL FIRE ESCAPE STAIRS	
D11.1	To 3no landings of metal fire escape staircase supply and install Suregrip 6mm antislip flooring panels with GRP nosings to be fitted with 12no Suregrip self tapping COLOURED screws and bed fully in two part moisture resistant adhesive via serrated trowel. Colour light grey with white nosings. Extended middle landing to have an additional 8no screws	0.00
D11.2	To treads of staircase (25no) supply and fix matching Suregrip 6mm preformed antislip GRP treads with nosings to be fitted with 8no Suregrip self tapping COLOURED screws per tread and bed fully in two part moisture resistant adhesive via serrated trowel. Colour light grey with white nosings.	0.00
D12.0	ELECTRICAL & MECHANICAL WORKS	
D12.1	Prior to dismantling of wall test and make safe existing power and lighting circuit to perimeter of parapet. Strip out 4no existing double power sockets and 4no LED lights and salvage lights for reuse. Strip out junction boxes.	0.00
D12.2	Upon completion of new walls allow for rerunning supplies via armoured cable under new decking to serve 4no new external rated double sockets and to serve 4no salvaged LED floodlights switched as existing arrangements. Exposed sections of cable from decking up to sockets and lights to be in 20mm black conduit with matching brackets and glanded into sockets and junction boxes	0.00
D12.3	In conjunction with works to parapet carefully set aside existing BT/telephone/data black cables to north east corner to facilitate works and and refit once brickwork is completed and neatly clip to wall with black clips.	0.00
D12.4	Isolate and disconnect existing external tap and pipework to north east parapet and replace with new with new outside tap with double check valve and sleeve with protective duct where built into wall. Insulate any exposed section of pipework and provide removable insulation cover to tap and pipework to prevent freezing.	0.00
D13.0	DECORATION & MISCELLANEOUS WORKS	

D13.1	<p>Allow for redecoration of the following metal and timber elements;</p> <p>Timber capping rail to existing guardrailing</p> <p>Metal guardrailing including top surface of top rail below timber capping and supporting posts and brackets</p> <p>Handrails and supporting posts to steps</p> <p>4no rainwater pipes and hoppers to terrace</p>	0.00
D13.2	<p>Treat all rust with Hammerite with No 1 rustbeater and finish with 2 full coats of Hammerite smooth satin or gloss agreed with client. Touch in any damaged areas following reinstallation of metalwork</p>	0.00
D13.3	<p>Decorate timber capping rail 75mm x 110mm with 2 coats of Sadolin Superdec satin black</p>	0.00
D13.4	<p>Gain access to windows W1 and W2 below landing of external staircase by unbolting landing section ensuring staircase is fully closed off and no access permitted. Check upper rooms are not in use before actioning. Refit on completion of decoration works.</p>	0.00
D13.5	<p>Check all windows ie W1,W2,W3,W4,W5,W6 for wet rot and report any defects to the CA prior to redecoration of these windows</p>	0.00
D13.6	<p>Strip back all loose putties and allow a days labour and materials for new putties to be fitted.</p>	0.00
D13.7	<p>Cut back and replace with matching section of oak window cill to W1 and timber plug and screw back with minimum 4no fixings.</p>	0.00
D13.8	<p>Allow the provisional sum of £500 for additional localised /splice repairs as identified and agreed with the CA once safe access has been gained</p>	500.00
D13.9	<p>Fully rub down all existing paintwork to windows and remove/scrape back all defective decorative paintwork and feather off together with knotting, stopping and priming and bring forward with undercoat ready for finishing</p>	0.00
D13.10	<p>All decorating materials shall be from the Dulux Trade range and colours to match existing.</p>	0.00
D13.11	<p>1 coat of Dulux Weathershield primer to all bare or new wood</p> <p>1 coat of Dulux Weathershield flexible undercoat</p> <p>2 costs of Dulux Weathershield Exterior High Gloss</p>	0.00
D13.12	<p>Allow for treatment of damp staining to the ceiling of the Holmes chamber using one coat of Zinsser Cover stain to areas affected by stains.</p> <p>Apply a mist coat and two full coats to all the ceiling using Dulux Trade Mouldshield Fungicidal Matt emulsion</p>	0.00
D13.13	<p>Upon completion of the works allow for a thorough clean of all adjoining surfaces including lower roof areas, windows, cills, staircase and the car park to the full satisfaction of the CA</p>	0.00

D13.14	Set aside existing bins , planters and any other loose furniture within the Town Hall and reposition of completion of the works	0.00
D14.0	ATTENDANCE	
D14.1	Allow for the full attendance and liaison on all service contractors in forming holes, chases and opening up etc and the subsequent making good on completion of the services.Undertake full clean of completed works and surrounding roofs, compound and surfaces affected by the works.	0.00
D14.2	The Main Contractor shall coordinate and integrate all works and in particular the services and specialist works undertaken by the sub-contractors.	0.00
D15.0	DAYWORKS	
D15.1	Works instructed by the CA to be undertaken as 'Dayworks' (i.e. on a time and material basis) shall be charged at the following rates which shall be for the net time worked on site to carry out the operation/task.	0.00
D15.2	The hourly labour rates shall include for all usual 'on-costs' such as overhead and profit, plant and tools, bonus, holiday pay, insurance, travelling and subsistence, supervision and administration costs etc.	0.00
D15.3	The % on-cost applied to materials shall include for all usual 'on-cost' such as measuring and ordering, collection and/or delivering to site, unloading, storing, protection, handling and insurance etc.	0.00
D15.4	The full details of works undertaken under 'dayworks' shall be accurately recorded which shall include the description of the task, operative's data, day, date, and details of hours spent on the task (scraps of paper with '2men, 3 days, digging holes for services' will not be accepted!)	0.00
D15.5	Confirm here your hourly rates for different trades;	
	Labourer x 1 hour	0.00
	Craftsman x 1 hour	0.00
	Material on costs : as a percentage	%
	Plant on costs : as a percentage.....	%
	Subtotal Section D	6500.00

SECTION E

TENDER SUMMARY

TENDER SUMMARY

The Contractor must complete this summary page to reflect the relevant work sections as set out below.

SECTION		TOTAL
A	General Preliminaries	£0.00
B	Health & Safety	£0.00
C	NBS Workmanship Clauses	£0.00
D	PARTICULAR SPECIFICATION	£0.00
D1	GENERALLY	£0.00
D2	SITE SET UP	£0.00
D3	SCAFFOLDING	£0.00
D4	GUARDRAILING	£0.00
D5	COPINGS	£0.00
D6	DECKING	£0.00
D7	BRICKWORK/DPC	£0.00
D8	FELT ROOFING	£0.00
D9	LEADWORK	£0.00
D10	LANDING TO FRENCH DOORS	£0.00
D11	UPGRADE METAL FIRE ESCAPE STAIRS	£0.00
D12	ELECTRICAL & MECHANICAL WORKS	£0.00
D13	DECORATION & MISCELLANEOUS WORKS	£0.00
D14	ATTENDANCE	£0.00
D15	DAYWORKS	£0.00
	Sub total	£0.00
	Contingency of sub total A, B, C, D @ 10%	£0.00
	Total VAT	£0.00
	Total inc. VAT	£0.00

Signed:

Company:

Date:

APPENDIX A

PHILIPS SURVEYORS LLP INFORMATION

T01 Location and Block Plan

T02 Proposed Plan

T03 Details

Millboard specification issue 020524

Millboard decking installation guide

Millboard Duospan installation guide

THIS DRAWING IS INDICATIVE ONLY AND MUST NOT BE RELIED UPON FOR CONSTRUCTION - UNLESS THE DRAWING IS NAMED AS 'CONSTRUCTION'.





ALL DIMENSIONS TO BE CHECKED AND VERIFIED WITH ANY DISCREPANCIES REPORTED TO PHILIPS SURVEYORS LLP.

THIS DRAWING REMAINS THE PROPERTY OF PHILIPS SURVEYORS AND MUST NOT BE COPIED OR REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION.

THE CLIENT MUST FAMILIARISE THEMSELVES WITH;
THEIR DUTIES CONCERNING HEALTH & SAFETY UNDER CDM2015 REGULATIONS AND
THE APPOINTMENT OF PRINCIPAL DESIGNER AND PRINCIPAL CONTRACTOR.

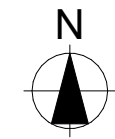
IF YOU NEED ANY FURTHER INFORMATION OR INDEPENDENT ADVICE ON UNDERTAKING YOUR CDM REGULATIONS DUTIES, PLEASE CONTACT THE ASSOCIATION FOR PROJECT SAFETY, 5 NEW MART PLACE, EDINBURGH EH141RW TEL: 08456 121 290 EMAIL: INFO@APS.ORG.UK YOU CAN VISIT THE HSE AND APS WEBSITES FOR MUCH MORE INFORMATION AT: WWW.HSE.GOV.UK AND WWW.APS.ORG.UK RESPECTIVELY.

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF CONSTRUCTION WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION:

-  INDICATES - WARNING
-  INDICATES - COMPULSORY INSTRUCTION
-  INDICATES - FOR INFORMATION
-  INDICATES - PROHIBITIVE INSTRUCTION

FOR INFORMATION RELATING TO END USE, MAINTENANCE, DEMOLITION ETC. - PLEASE REFER TO THE HEALTH & SAFETY FILE.

IT SHOULD BE ASSUMED THAT ALL WORKS ARE TO BE CARRIED OUT BY A COMPETENT CONTRACTOR AND, WHERE APPLICABLE, TO AN APPROVED METHOD STATEMENT.



A	Neighbours access shown	17/07/24	THR
Rev.	Amendments	Date	Drw.



PHILIPS SURVEYORS LLP, THE OLD COACH HOUSE, 78 LOWER STREET, PULBOROUGH, WEST SUSSEX, RH20 2AA
TEL 01798 873222 FAX 01798 873444
EMAIL INFO@PHILIPS-SURVEYORS.CO.UK
WWW.PHILIPSHARTEREDSURVEYORS.CO.UK



CLIENT:

Arundel Town Council
Arundel Town Hall, Maltravers St.
Arundel, BN18 9AP

PROJECT:

Arundel Town Hall, Holmes Chamber – Roof & Parapet Investigation, replacement decking and associated works.

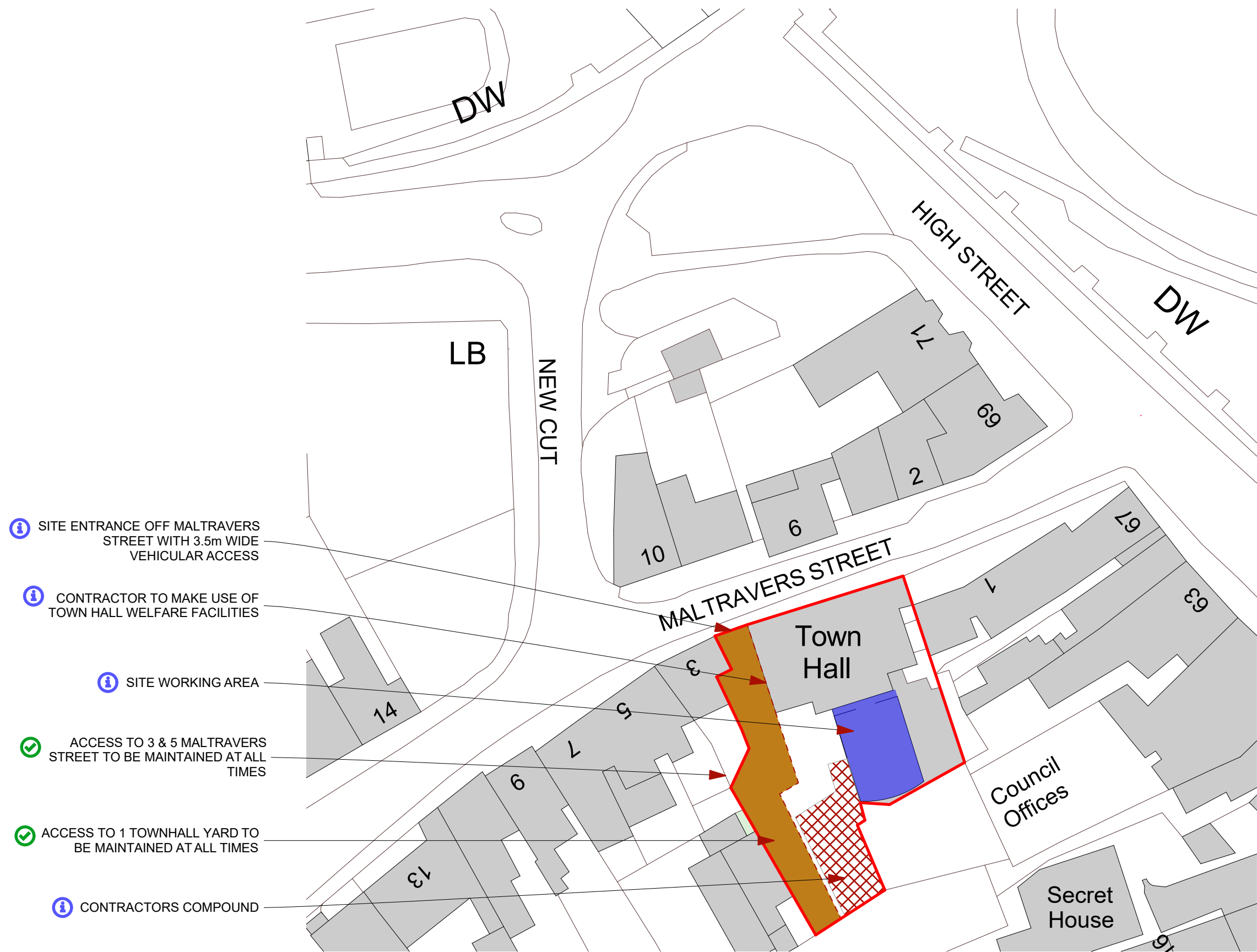
DRAWING TITLE:

Tender

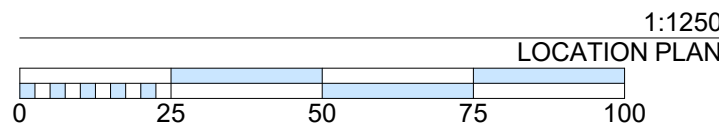
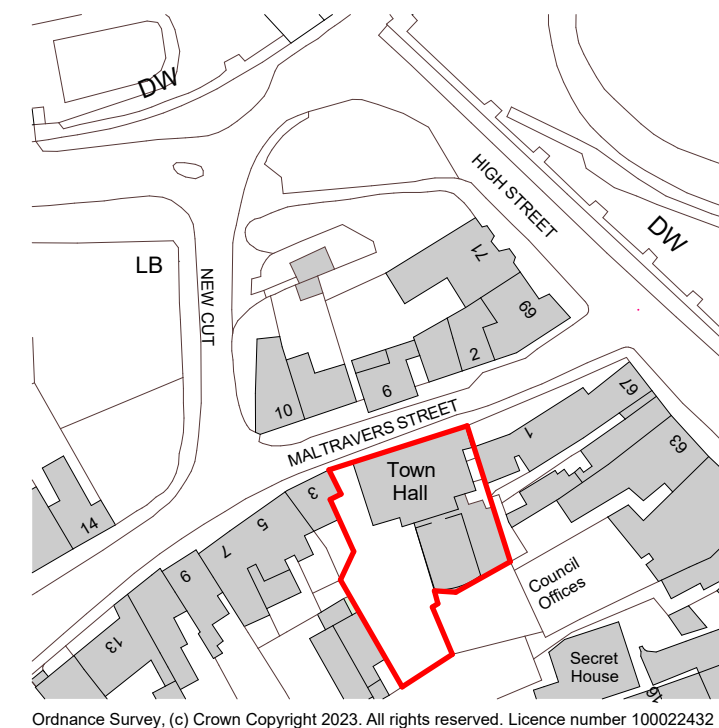
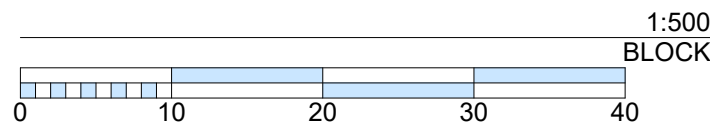
Location & Block Plan

DRAWN: THR	JOB NO: 2595	SCALE @ A2: As Shown
CHECKED: POW	DRAWING NO: T01	REV: A
DATE: Nov 23		

© Philips Surveyors LLP.

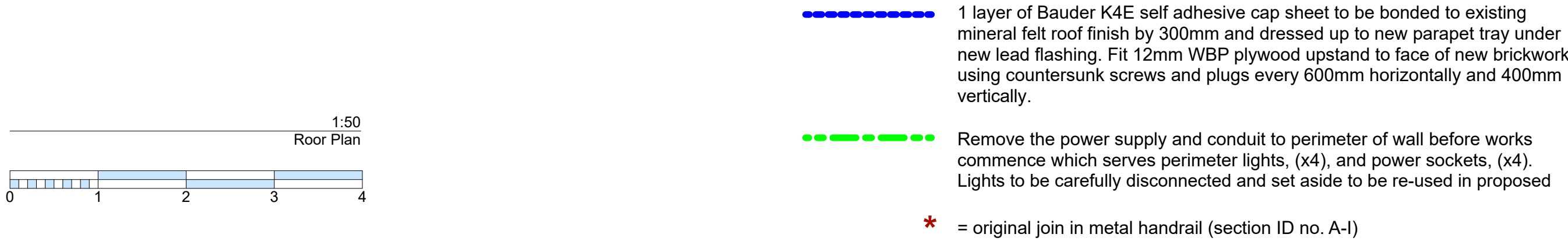
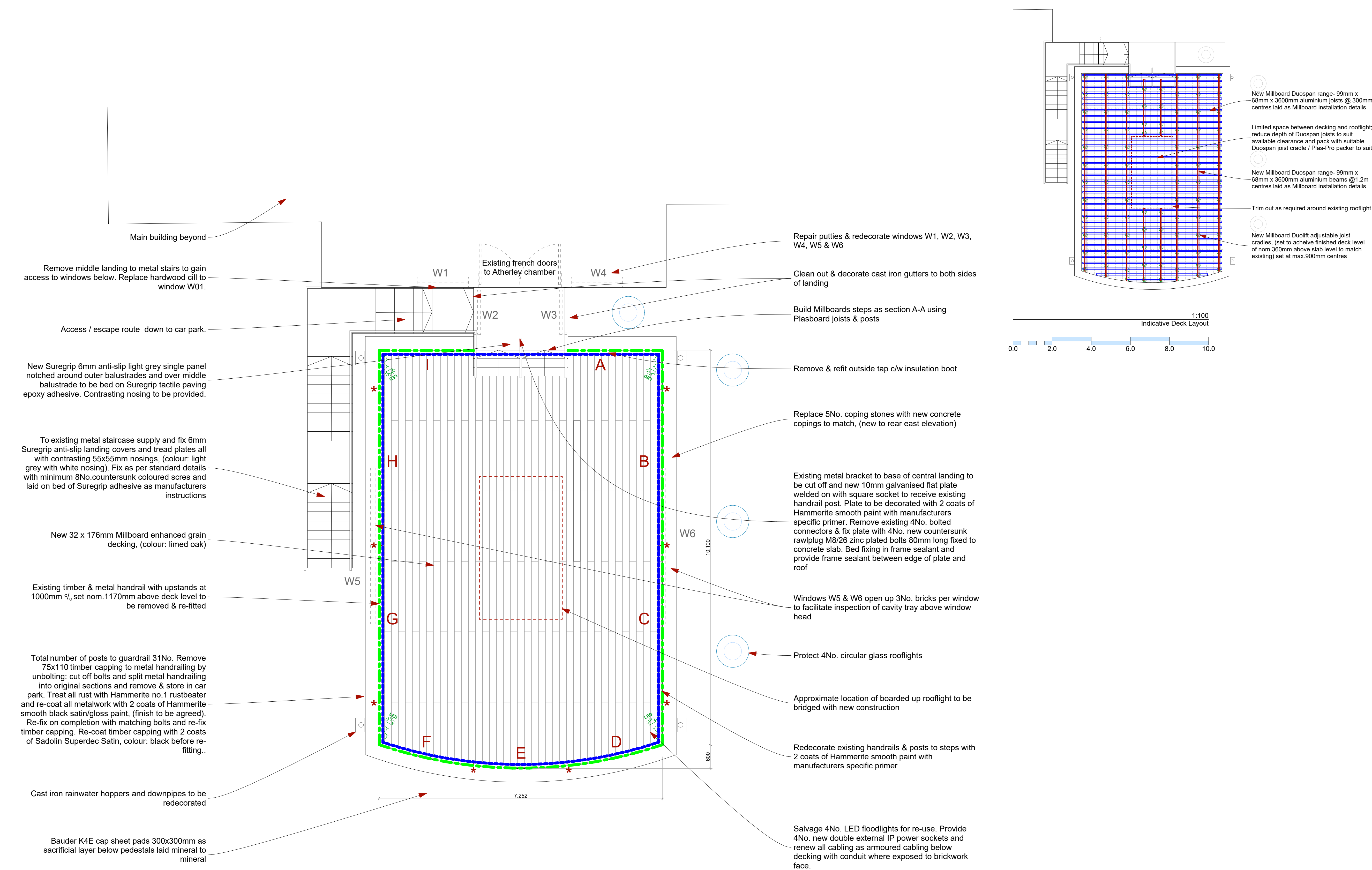


Ordnance Survey, (c) Crown Copyright 2023. All rights reserved. Licence number 100022432



-  APPLICATION SITE BOUNDARY
-  AREA OF PROPOSED WORKS
-  CONTRACTORS PARKING AND COMPOUND AREA FROM BASE OF METAL STAIRS
-  AREA TO BE KEPT CLEAR AT ALL TIMES FOR ACCESS TO NEIGHBOURING PROPERTIES





THIS DRAWING IS INDICATIVE ONLY AND MUST NOT BE RELIED UPON FOR CONSTRUCTION - UNLESS THE DRAWING IS NAMED AS 'CONSTRUCTION'.

ALL DIMENSIONS TO BE CHECKED AND VERIFIED WITH ANY DISCREPANCIES REPORTED TO PHILIPS SURVEYORS LLP.

THIS DRAWING REMAINS THE PROPERTY OF PHILIPS SURVEYORS AND MUST NOT BE COPIED OR REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION.

THE CLIENT MUST FAMILIARISE THEMSELVES WITH:
- THEIR DUTIES CONCERNING HEALTH & SAFETY UNDER CDM2015 REGULATIONS AND
- THE APPOINTMENT OF PRINCIPAL DESIGNER AND PRINCIPAL CONTRACTOR.

IF YOU NEED ANY FURTHER INFORMATION OR INDEPENDENT ADVICE ON UNDERTAKING YOUR CDM REGULATIONS DUTIES, PLEASE CONTACT THE ASSOCIATION FOR PROJECT SAFETY, 5 NEW MART PLACE, EDINBURGH EH4 1RW TEL: 08456 121 298 EMAIL: info@aps.org.uk YOU CAN VISIT THE HSE AND APS WEBSITES FOR MUCH MORE INFORMATION AT: www.hse.gov.uk AND www.aps.org.uk RESPECTIVELY.

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF CONSTRUCTION WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION:

- INDICATES - WARNING
- INDICATES - COMPULSORY INSTRUCTION
- INDICATES - FOR INFORMATION
- INDICATES - PROHIBITIVE INSTRUCTION

FOR INFORMATION RELATING TO END USE, MAINTENANCE, DEMOLITION ETC. - PLEASE REFER TO THE HEALTH & SAFETY FILE.

IT SHOULD BE ASSUMED THAT ALL WORKS ARE TO BE CARRIED OUT BY A COMPETENT CONTRACTOR AND, WHERE APPLICABLE, TO AN APPROVED METHOD STATEMENT.

Rev.	Amendments	Date	Drw.



PHILIPS SURVEYORS
BUILDING SURVEYORS, DESIGNERS & CONSULTANTS

PHILIPS SURVEYORS LLP, THE OLD COACH HOUSE, 78 LOWER STREET, PULBOROUGH, WEST SUSSEX, RH20 2AA
TEL 01798 873222 FAX 01798 873444
EMAIL info@philips-surveyors.co.uk
www.philipscharteredsurveyors.co.uk



CLIENT:

Arundel Town Council
Arundel Town Hall, Maltravers St.
Arundel, BN18 9AP

PROJECT:

Arundel Town Hall, Holmes Chamber – Roof & Parapet Investigation, replacement decking and associated works.

DRAWING TITLE:

Tender

Proposed Roof Plan

DRAWN: THR	JOB NO: 2595	SCALE @ A1: As Shown
CHECKED: POW	DRAWING NO: T02	REV:
DATE: Nov 23		

© PHILIPS SURVEYORS LLP.

THIS DRAWING IS INDICATIVE ONLY AND MUST NOT BE RELIED UPON FOR CONSTRUCTION - UNLESS THE DRAWING IS NAMED AS 'CONSTRUCTION'.





ALL DIMENSIONS TO BE CHECKED AND VERIFIED WITH ANY DISCREPANCIES REPORTED TO PHILIPS SURVEYORS LLP.

THIS DRAWING REMAINS THE PROPERTY OF PHILIPS SURVEYORS AND MUST NOT BE COPIED OR REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION.

THE CLIENT MUST FAMILIARISE THEMSELVES WITH:
- THEIR DUTIES CONCERNING HEALTH & SAFETY UNDER CDM2015 REGULATIONS AND
- THE APPOINTMENT OF PRINCIPAL DESIGNER AND PRINCIPAL CONTRACTOR.

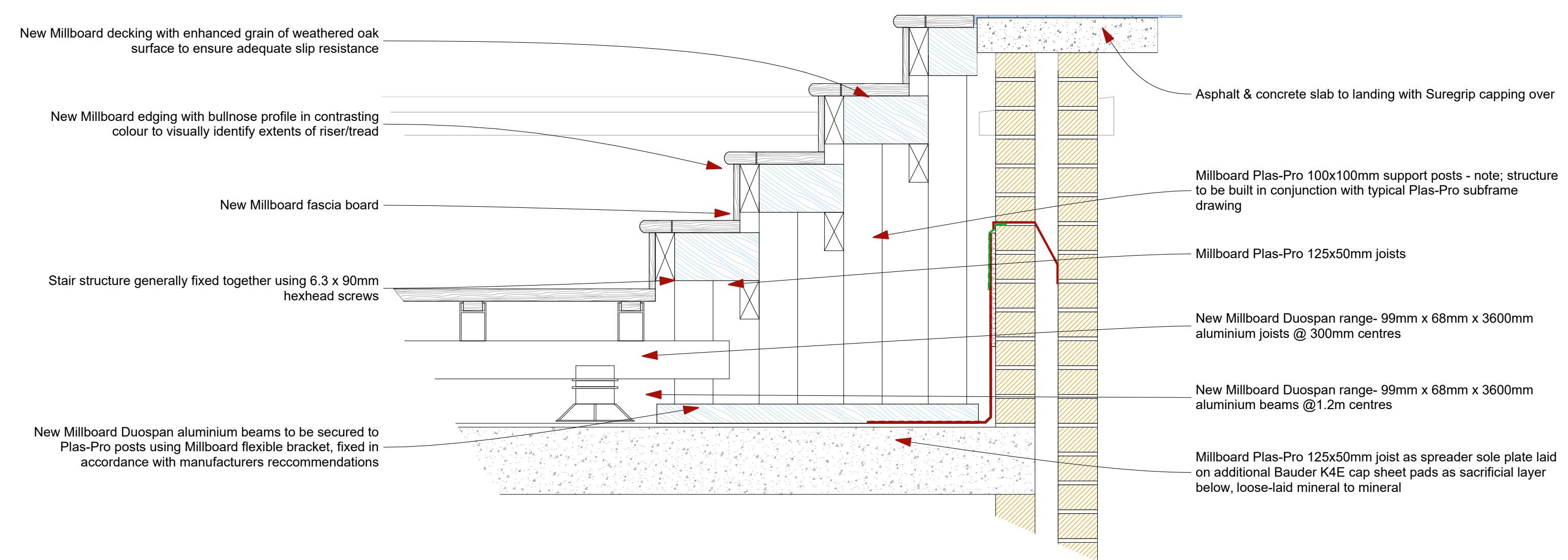
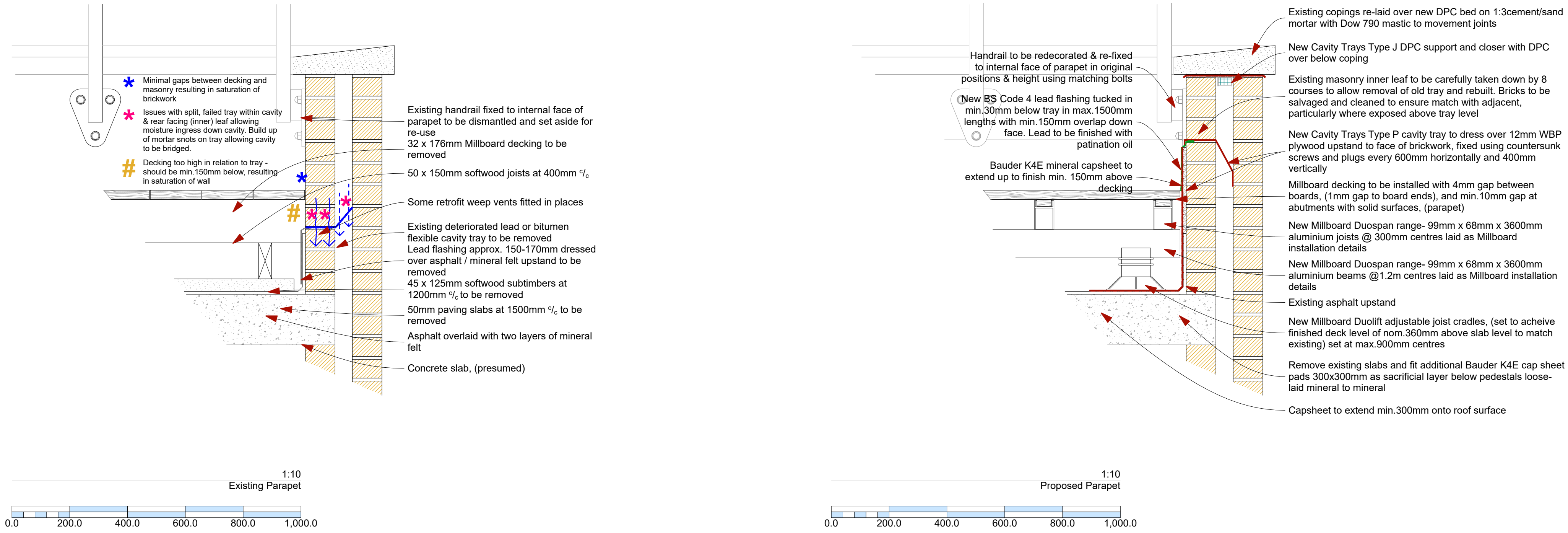
IF YOU NEED ANY FURTHER INFORMATION OR INDEPENDENT ADVICE ON UNDERTAKING YOUR CDM REGULATIONS DUTIES, PLEASE CONTACT THE ASSOCIATION FOR PROJECT SAFETY, 5 NEW MART PLACE, EDINBURGH EH14 1RW TEL: 08456 121 298 EMAIL: info@aps.org.uk YOU CAN VISIT THE HSE AND APS WEBSITES FOR MUCH MORE INFORMATION AT: www.hse.gov.uk AND www.aps.org.uk RESPECTIVELY.

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION
IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF CONSTRUCTION WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION:

 INDICATES - WARNING
 INDICATES - COMPULSORY INSTRUCTION
 INDICATES - FOR INFORMATION
 INDICATES - PROHIBITIVE INSTRUCTION

FOR INFORMATION RELATING TO END USE, MAINTENANCE, DEMOLITION ETC. - PLEASE REFER TO THE HEALTH & SAFETY FILE.

IT SHOULD BE ASSUMED THAT ALL WORKS ARE TO BE CARRIED OUT BY A COMPETENT CONTRACTOR AND, WHERE APPLICABLE, TO AN APPROVED METHOD STATEMENT.



Rev.	Amendments	Date	Drw.
------	------------	------	------

PS PHILIPS SURVEYORS
BUILDING SURVEYORS, DESIGNERS & CONSULTANTS

PHILIPS SURVEYORS LLP, THE OLD COACH HOUSE, 78 LOWER STREET, PULBOROUGH, WEST SUSSEX, RH20 2AA
TEL 01798 873222 FAX 01798 873444
EMAIL info@philips-surveyors.co.uk
www.philipscharteredurveyors.co.uk



CLIENT:

Arundel Town Council
Arundel Town Hall, Maltravers St.
Arundel, BN18 9AP

PROJECT:

Arundel Town Hall, Holmes Chamber – Roof & Parapet Investigation, replacement decking and associated works.

DRAWING TITLE:

Tender

Details

DRAWN: THR	JOB NO: 2595	SCALE @ A1: As Shown
CHECKED: POW	DRAWING NO: T03	REV:
DATE: Nov 23		

© PHILIPS SURVEYORS LLP.

Millboard Hand Moulded Decking

Product Specification Document

Product specification to be Millboard Enhanced Grain/Weathered Oak/Lasta-Grip boards supplied by Millboard Ltd.

Manufacturer

Millboard Ltd
UK Head Office
1 Argosy Ct,
Coventry CV3 4GA
T: 44 (0)24 7658 7995
E: projects@millboard.co.uk
W: www.millboard.com

Company registered No. 06061318
VAT No: 980 616602

Product

Millboard Enhanced Grain/Weathered Oak/Lasta-Grip boards
Literature: <https://www.millboard.com/en-gb/resources>

Detailed description

Decking board to be used is Millboard Enhanced Grain/Weathered Oak/Lasta-Grip boards, designed and manufactured in the UK, and supplied by Millboard Ltd.

Millboard decking board is a polyurethane resin mineral board, hand-moulded from real oak, and hand-finished. Millboard decking is slip-resistant, splinter-free, anti-static and its non-porous composition makes it resistant to mould and insect infestations. UV and weather-stability, stain resistance and resistance to rotting and warping, make it a low maintenance product for use in all standard outdoor flooring applications. To be used with Millboard Durafix® stainless steel screw fixings.

Virgin applications: Millboard decking to be fitted with the Millboard DuoSpan subframe system, Plas-Pro framework or a ventilated timber framework of a suitably durable and structural quality.
Replacement applications: Millboard can be fitted over existing subframes of a suitably durable quality and structural stability. Timber subframes require suitable ventilation.

Key features

Millboard decking:

- 100% wood-free and hand-moulded, on three sides, to give a real-wood grain representation.
- Unique Lastane® finish provides low slip potential, and is resistant to scratches, food and drink stains, and everyday wear and tear.
- Millboard Durafix® stainless steel screw fixings sink into the Lastane® material to achieve a virtually indistinguishable mark.
- Non-porous composition makes it resistant to mould, fungus, insects and liquids (including fats, food, drink and urine).
- No need to leave a ventilation gap when installing.
- Manufactured under ISO 9001:2015 Quality Standards, ISO 14001:2015 Environmental Standards and ISO 45001:2018 Occupational Health and Safety Standards.
- Boards can be incinerated at the end of their useful life, for energy replenishment.

Applications

Use Millboard decking for all standard outdoor flooring applications (e.g. in residential, commercial, education, healthcare, leisure and hospitality) including the following:

- Ground level terraces/patios
- Roof level terraces
- Balconies (subject to Building Control)
- Podium decks
- Public spaces/areas
- Pathways
- Boardwalks
- Pool surrounds
- Jetties/pontoons/marinas

Product

Decking board to be used is Millboard Enhanced Grain/Weathered Oak/Lasta-Grip. Millboard Enhanced Grain/Weathered Oak/Lasta-Grip is a polyurethane resin mineral board, with a non-porous composition, hand-moulded from real oak and hand-finished.

Material composition

The structural core of Millboard decking is a blend of natural minerals bonded in a polymer resin, with long fibre reinforcement for mechanical strength and durability. Top surface is a textured, resilient Lastane® layer which is chemically melded to the core and hand-tinted using 2K component pigments that resist fading and UV damage.

Predicted life expectancy: Polyurethane products typically achieve 50 years or more.

Product size

Millboard product	Millboard Enhanced Grain		Millboard Weathered Oak	Millboard Lasta-Grip
Dimensions (W x L x H) (mm)	176 x 3600 x 32	126 x 3600 x 32	200 x 3600 x 32	200 x 3600 x 32
Weight per board (kg)	11.4	8.5	12.9	12.9
Fixings per board (domestic)	22	22	22	22
Fixings per board (commercial)	26	26	26	26
Boards per m ²	1.54	2.14	1.36	1.36
Weight per m ² (kg)	17.6	18.2	17.5	17.5

Technical performance

Safety

Slip resistance

Low potential for slip in wet and dry conditions. Pendulum Test Values when tested to BS 7976-2:2002+A1:2003 using slider 96 tested in three directions and in accordance with UK Slip Resistance Group (UKSRG)/Health & Safety Executive (HSE) guidelines:

Millboard product	Millboard Enhanced Grain	Millboard Weathered Oak	Millboard Lasta-Grip
Slip Resistance: Wet	PTV: 36-42	PTV: 41-56	PTV: 43-63
Slip Resistance: Dry	PTV: 49-60	PTV: 54-79	PTV: 58-75

Strength performance (based on ISO 14125:1998 3pt Bend)

Product	Span (mm)	Load (N)	Flexural Strength (MPa)	Stiffness (N/mm)
Enhanced Grain Decking 176mm	400	4426.32	14.62	280.2
	300	5753.56	14.11	477.39
Enhanced Grain Decking 126mm	400	3489.56	16.24	405.61
	300	4083.52	14.17	668.63
Weathered Oak Decking 200mm	400	4325.09	12.85	513.22
	300	5901.93	13.22	711.29
Lasta-Grip Decking 200mm	400	5423.26	18.02	567.05
	300	7107.77	15.84	879.8

Anti-static performance

- Surface resistance parallel to the surface texture: $6.9 \times 10^9 \Omega/\text{sq}$ (6.9×10^9) when tested to IEC 62631-3-23. Result is consistent and in the range of anti-static flooring
- Surface resistance perpendicular to the surface texture: $6.5 \times 10^9 \Omega/\text{sq}$ (6.4×10^9) when tested to IEC 62631-3-23. Result is consistent and in the range of anti-static flooring

Durability and performance**UV stability and degradation**

Photostability: 2% LRV when tested, over 5000hrs, to BS EN ISO 4892-2: 2006

Stain and chemical resistance

Resistance to staining: no visible changes to decking boards when tested, to BS EN 438-2: 2005, for acetone, sodium hydroxide, hydrogen peroxide and boot polish.

Resistance to mechanical damage

- Resistance to static indentation: 0.1mm when tested to MOAT 27:1983 (10kg load via a 10mm diameter rounded indenter for 41 days)
- Soft body impact: 0mm when tested to MOAT 43:1987
- Hard body impact: 0mm when tested to MOAT 43:1987
- Impact resistance after aging: no cracking or damage to topcoat when tested to BS EN 13245-1:2010
- Taber abrasion: 261mg when tested in accordance with BS EN ISO 7784-2:2006 (1000g x 1000 cycles)

Dimensional stability

- Dimensional stability when moistening (65-85% relative humidity): 0.47mm/m when tested to BS EN 318: 2002
- Dimensional stability when drying (65-30% relative humidity): -0.30mm/m when tested to BS EN 318: 2002

Thermal performance

- Thermal conductivity (Weathered Oak): 0.089 W/mK when tested with FOX 200 heat flow meter (with set points at 10°C and 38°C)

- Thermal conductivity (Enhanced Grain): 0.084 W/mK when tested with FOX 200 heat flow meter

Installation

Working specification for Millboard decking boards

For all applications Millboard decking boards to be installed with a 4mm gap between the boards and a 1mm gap at butt ends, to facilitate drainage. There is no need for a ventilation gap to be left under Millboard decking boards. The maximum unsupported overhang for the boards is 50mm, each cut board must be supported by a minimum of three joists. Each board must be screwed down with 2 x Millboard Durafix® stainless steel screw fixings where a board crosses a joist, and 3 x Millboard Durafix® stainless steel screw fixings at the ends of the boards.

Ground level application (soft surface)

Millboard decking boards installed over DuoSpan 99mm Joists and Beams, Beams supported by Plas-Pro Posts concreted into the ground. Installed to the recommendations set out in installation guide found on www.millboard.com/en-gb/duospan

Hard surfaces application (roof terrace, concrete base)

Millboard decking boards installed over DuoSpan Joists, Joists supported by DuoLift joists supports onto a solid/stable base. Installed to the recommendations set out in installation guide found on www.millboard.com/en-gb/duolift

- **Residential applications (2.5kN/m² uniform distributed load):**
Joists must support boards at 400mm centres if boards are at 90° to joists, if boards are at 45° then joists must be set at 300mm centres
- **Commercial applications (5kN/m² uniform distributed load):**
Joists must support boards at 300mm centres if boards are at 90° to joists, if boards are at 45° then joists must be set at 240mm centres

Product accessories and tools

- Cutting, Protective gloves, FFP3 dust mask and safety glasses should be worn:
 - Millboard decking boards can be cut with standard wood cutting tools, carbon-tipped saw blades are recommended.
 - DuoSpan Joists and Beams can be cut with a mitre saw with an aluminium cutting blade
- Board Fixings:
 - Millboard Durafix® stainless steel T15 decking screws 4.5 x 60mm
 - Millboard Durafix® stainless steel T15 decking screws 4.5 x 45mm
 - Millboard Durafix® stainless steel T15 fascia screws 4.5 x 35mm
- Edging: Millboard Bullnose Board (W x L x H) 150 x 3600 x 32mm, Millboard Flexible Bullnose edging (W x L x H) 50 x 2400 x 32mm, Millboard Flexible Square edging (W x L x H) 50 x 2400 x 32mm
- Fascia's: Millboard Fascia Board (W x L x H) 16 x 3600 x 146mm
- Subframe: Millboard DuoSpan joist system:
 - DuoSpan 51mm Joist (H x W x L) 51 x 68 x 3600mm
 - DuoSpan 99mm Joist (H x W x L) 99 x 68 x 3600mm
 - DuoSpan 136mm Beam (H x W x L) 99 x 68 x 3600mm
- Subframe Joist accessories:
 - DuoSpan Joist Insert (H x W x L) 25 x 50 x 3000mm
 - Plas-Pro Post (H x W x L) 100 x 100 x 3000mm
 - Plas-Pro Fascia Support (H x W x L) 100 x 25 x 3000mm
- Subframe bracketry:
 - DuoSpan 51 90° Angle Bracket set (10 brackets in a box – incl fixings)

- DuoSpan 51 Straight Connector set (10 connectors in a box – incl fixings)
- DuoSpan 51 Flexible Bracket set (10 brackets in a box – incl fixings)
- DuoSpan 99 90° Angle Bracket set (10 brackets in a box – incl fixings)
- DuoSpan 99 Straight Connector set (10 connectors in a box – incl fixings)
- DuoSpan 99 Flexible Bracket set (10 brackets in a box – incl fixings)
- DuoSpan Hold-down Clip set (30 clips in a box – incl fixings)
- Subframe fixings:
 - DuoSpan Bracket to Plas-Pro screw (5x25mm 100pcs in box)
 - Plas-Pro to DuoSpan screws (5x50mm 100 pcs in a box)
- Joist supports: to be used in conjunction with Millboard DuoSpan, timber or Plas-Pro - to be laid over a solid/stable base. Layouts shown on the Millboard website (www.millboard.com).
 - DuoLift 15-60mm Joist Cradle (10 in a box)
 - DuoLift 20mm Self-Levelling Joint (10 in a box)
 - DuoLift 45mm Risers (10 in a box)
 - DuoLift 45mm Foot (10 in a box)

The information in this document was correct at the time of going to print, due to our culture of continuous improvement we reserve the right to change the information at any time without prior notice should further tests reveal different results

Appendix: Relevant Test Standards

Relevant standards (ISO, CEN, BS, BSI Kitemark, BBA, etc)
BS EN 13245-1:2010 Plastics. Unplasticised poly-vinyl chloride (PVC-U) profiles for building applications. Designation of PVC-U profiles
BS 7976-2:2002+A1:2003 Pendulum testers. Method of operation
BS EN 318:2002 Wood based panels. Determination of dimensional changes associated with changes in relative humidity
BS EN 438-2:2005 High-pressure decorative laminates (HPL). Sheets based on thermosetting resins (usually called laminates). Determination of properties
BS EN ISO 4892-2:2006 Plastics. Methods of exposure to laboratory light sources. Xenon-arc lamps
BS EN ISO 7784-2:2006 Paints and varnishes. Determination of resistance to abrasion. Rotating abrasive rubber wheel method
ISO 14001:2015 Environmental management systems. Requirements with guidance for use
ISO 9001:2008 Quality management systems. Requirements
MOAT 27:1983 General directive for the assessment of roof waterproofing systems
MOAT 43:1987 UEAtc Directive for Impact Testing Opaque Vertical Building Components
ISO 45001:2018 Occupational Health and Safety Standards

millboard

Live. Life. **Outside.**



Millboard Decking

Installation and user guide

Contents

Tools & Equipment	3
Key points	4
Product Range & Usage	5
Storage & Handling	5
Colour	6
Pre-Install & framework	7
Cutting products	8
Fastening to the substructure	9
Gapping requirements	10
Keeping boards straight	11
Deck Edging & Fascia	12
Bullnose board	12
Flexible Edging	13
Taking Care	14
Frequently asked questions	15



Tools & Equipment

These are the tools/equipment that you need to install Millboard decking.



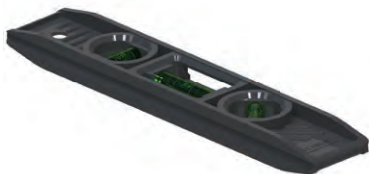
Mitre saw/jigsaw/handsaw

Millboard decking boards can be cut with standard wood cutting tools (i.e. mitre saw, jigsaw, handsaw). We would recommend using a carbon-tipped saw blade.



Power drill and driver

Standard Power drill drivers can be used to install our Durafix® screws through the boards. Impact drivers are not recommended to be used when fitting Millboard decking.



Spirit level

A spirit level is used to ensure that the subframe posts are set upright, as well as being used as a straight edge to ensure the joists/bearers are flush level with each other.



Personal Protective Equipment

When handling Millboard products, it is advised to wear long sleeves and gloves. When cutting products it is advised to wear a FFP3 dustmask, ear defenders and safety glasses. Knee pads are recommended to be worn when fitting decking.



Tool set

Standard carpentry tools will be needed to complete the installation, including: tape measure, a pencil, set square, planer, utility knife, surform and a drill bit set.



String line

A string line is used to ensure the boards are installed straight.

Other items that may be required (supplied by others):

- Silicone spray (for use with the Durafix screws)
- Polyurethane wood glue (for use when gluing mitre joints)
- Superglue (for use when gluing mitre joints)
- Packers (for use at the sides/end of boards, also to help the boards finish flush)






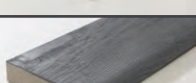


Key Points

1. **Planning** - If the installation of Millboard is taking place in conjunction with other building works, or as part of a bigger project, ensure that care is taken not to transfer substances, such as dirt and dust, on to the surface of the boards. The product should be covered or even installed after other construction works have taken place.
2. **Handling** - Be careful not to drag the boards off the pallet or over each other, as this could cause abrasion or marking on the surface.
3. **Pre-install** - Lay the boards out prior to installing, to achieve the desired mix of grain pattern and tonal variance *
4. **Working with the boards** - As Millboard is a hand-moulded product, slight variance in the board dimensions should be expected. This guide details best practise when working with the product.
5. **Framework** - The framework should be designed and built to complement the premium quality of the boards and built to last. The incorrect 'USE CLASS' grade of timber or poor subframe design and construction is likely to reduce the life or structural performance. Joist centre spacing is critical and is prescribed within this guide
6. **Fixings** - Our Durafix screws have been designed to be used with our Millboard decking. Other screws should not be used through the face of the boards. We provide very precise instructions in this guide regarding our Durafix screws, in order to achieve best possible finish for the decking. Please ensure that these instructions are followed accordingly.
7. **Board gapping** - We recommend 4mm gap between the side of boards and a 1mm gap at the end of the boards. Consistent board gapping should be adopted throughout the install. We recommend a 10mm gap between the boards/subframe and any abutting structure (wall, house doors)
8. **Edging profiles** - We recommend that our purpose-made edgings are fitted to all steps and perimeters of the deck that will be subject to impact and regular foot traffic
9. **Taking care** - If the board surface becomes dirty during installation, this should be cleaned as soon as possible using warm soapy water and a brush. Within this guidance we provide advice regarding cleaning and upkeep. If you have any further queries please contact us accordingly
10. **Limited warranty** - Millboard shall be under no liability in respect of any defect arising from improper installation caused by failure to follow our instructions as set out in this guide.

For best results, please ensure that you have read and understood our guidance prior to starting your project.

*On delivery of our products, if you find the colour unacceptable or believe them to be defective in any way, please contact us.

Product Range & Usage

Range	Name	Size		Recommended use
Decking Boards	Enhanced Grain	126 x 32 x 3600		Square edged boards used for decking areas, boards can also be used as the fascia of a deck or as a picture frame as long as it is just for aesthetical purposes.* Important note: See page 13 ref fascia
		176 x 32 x 3600		
	Weathered Oak	200 x 32 x 3600		
	Lasta-Grip	200 x 32 x 3600		
Fascia	Fascia Board	146 x 16 x 3600		Fascia boards are used as a decorative cover for the subframe, they are used under the edging profiles.
Edging	Bullnose Board	150 x 32 x 3600		Rigid edging boards with one bullnosed edge.
	Flexible Bullnose Edging	50 x 32 x 2400		Flexible edging profiles used on the edges of decks and steps bending to a radius of 1.2m
	Flexible Square Edging	50 x 32 x 2400		

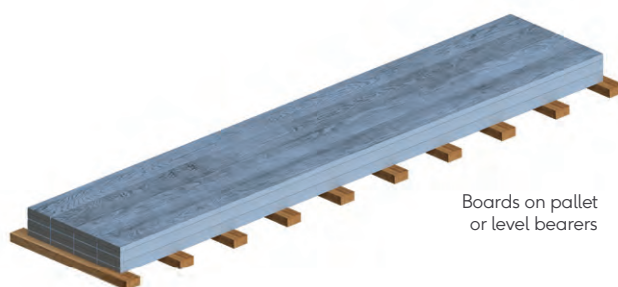
* Square edged decking boards will exhibit more wear when used on edges that will sustain impact. Edging profiles should be used in these locations

Storage and handling

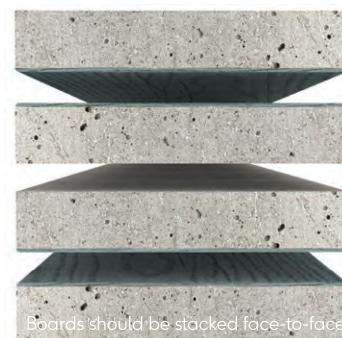
Millboard should always be stored on a flat surface or level bearers a maximum of 400mm apart and stacked face-to-face, not back-to-face.

Be careful not to drag the boards off the pallet or over each other, as this could cause abrasion or marking on the surface. Damage may not be visible immediately but the Lastane layer could be adversely affected with exposure to UV, this would not be covered under the terms of our limited warranty. Only move the pallet if the boards are safely strapped to it.

Wear gloves and long sleeves when handling the boards and take care when lifting them. We recommend that two people carry the boards.



Boards on pallet
or level bearers



Boards should be stacked face-to-face

Boards stacked face-to-face

Colour

Millboard has been designed to replicate the natural variances of timber and is manufactured to have tonal variance in the colour.

We go to extraordinary lengths to recreate the look of natural products and therefore intentionally add secondary toning colours. This painstaking process means that there may be variance within the same board or between boards.

Buying all the Millboard decking you need at the same time should help to ensure that the colour is consistent and we would always recommend laying out the boards before installation, to create an effective, subtle blend. Antique Oak boasts more tonal variation per individual board than any of the other colours in the Millboard range.

As with all things constantly exposed to ultraviolet light and all weathers, natural weathering will occur slightly in time. This is normal for decking. On delivery if you find the colour unacceptable or believe them to be defective in any way, please contact us.



Colour tone may vary from batch to batch

It is best to lay boards out a day before installation, to ensure tone and grain variation is accounted for, and also to help the boards acclimatise to the project location. If there are any foreseen issues with the boards, this should be highlighted with Millboard before installing.

As with natural timber products, various grain patterns (i.e. Quarter sawn, plain sawn) will reflect the light differently so may appear a different shade to the eye. This is intentionally replicated with the Millboard products.



Different grains patterns

Pre-install & framework

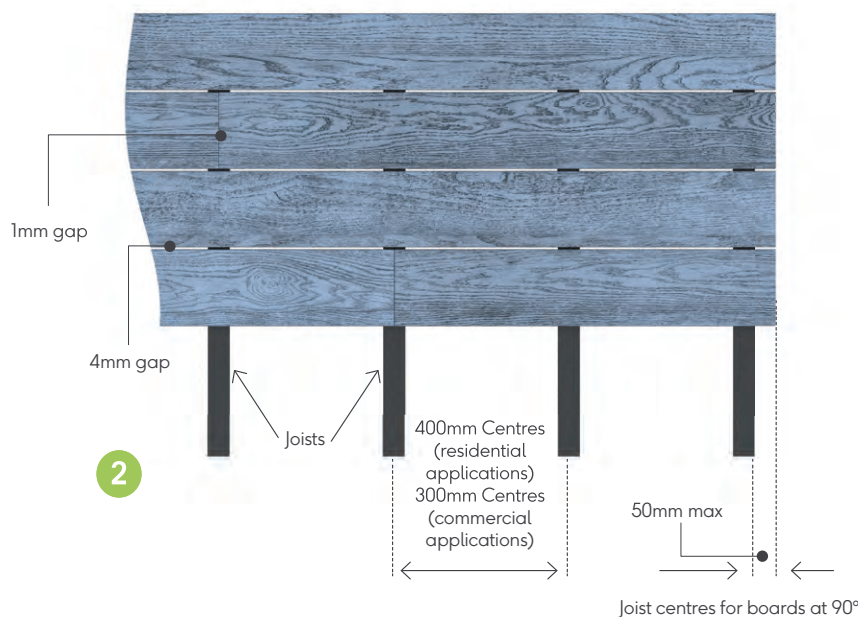
Millboard is a hand-moulded product; slight variance in the board dimensions should be expected. Tolerances we deem as acceptable are: length $\pm 5\text{mm}$, width $\pm 3\text{mm}$, thickness $\pm 2\text{mm}$. (1)

Fitting boards flush: When working with the boards, packers may be required to shim up a board to create a flush finish between two boards.

Fitting to a string line: We recommend fitting deck boards to a string line. The boards may not be perfectly straight when they are delivered, but they can be pulled straight as they are being fitted by adjusting the gaps between the boards to be aligned with the string-line.

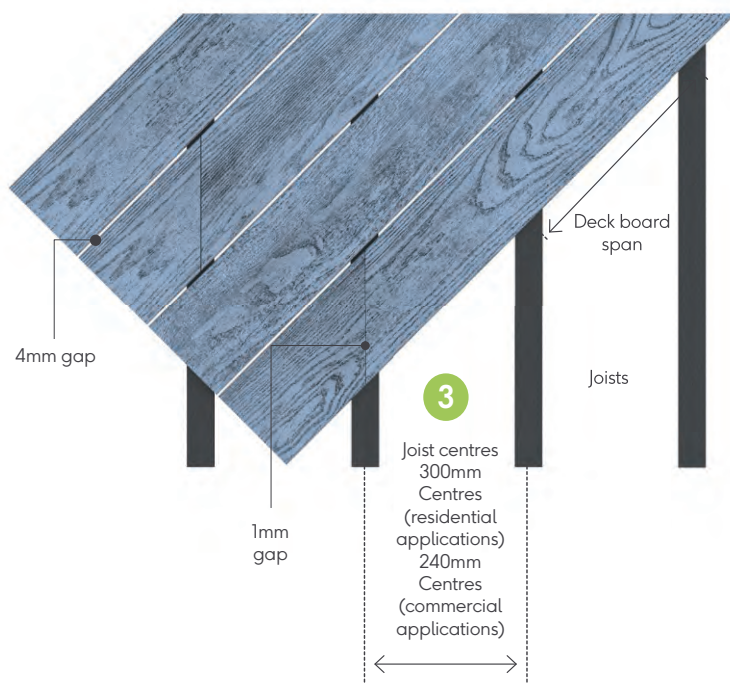
Board ends: Please bear in mind that as the ends of the boards may need to be trimmed to make them square, this will reduce the length of the boards which could then affect the required joist spacing.

Decking falls: We recommend that decking is built to a minimum slight fall of 1:200 away from any buildings. This is not a regulation requirement but does help to negate pooling which in turn helps to reduce dirt retention, algae build up and maintenance.

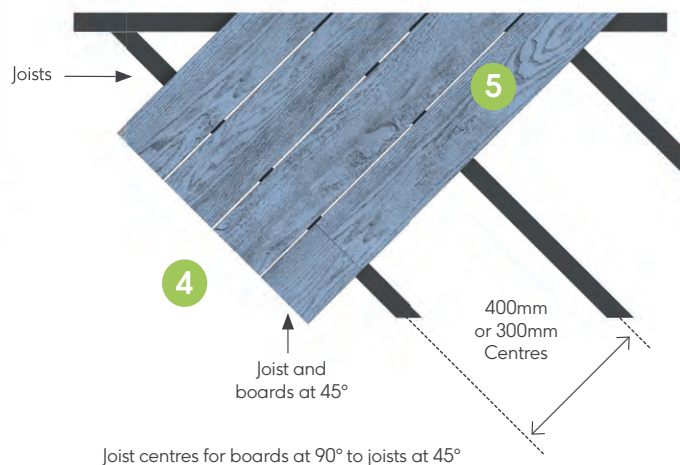


Joist spacing: Joist spacing of 400mm centres is recommended for normal residential use. On commercial use, bridges, balconies, moorings, doorways and steps, we recommend 300mm centres. (2)

For laying boards 45° to the joist, reduce the joist centres to 300mm for residential and 240mm for commercial use. (3) Alternatively turn the joists round to be at 90° to the board direction (4) as this is less wasteful of material and time. If you need to cut Millboard down along the length, reduce the joist centres accordingly. A minimum of three joists is required for any cut boards. (5)



Joist centres for boards at 45°



Joist centres for boards at 90° to joists at 45°

Subframes

The subframe of a decking area is one of the most important parts of having a deck installed. Whilst the subframe is generally hidden, it is crucial for the deck's longevity. Millboard decking can be installed on Plas-Pro (recycled plastic), DuoSpan (aluminium) or treated timber subframes. If timber is to be used as the subframe then relevant guidance from industry professionals should be followed (Trada, The WPA, etc). This includes, but is not limited to: the whole subframe should be timbers treated to use Class 4, applying end grain preservative to all cuts and using Stainless Steel or HDG screws and bolts for fixing it together. High quality deck tape should also be applied to the top of the joists before deck board installation.

More information on subframe choices can be found in our in-depth subframe guide

www.millboard.com/en-gb/subframes

For more in-depth installation details on the DuoSpan or Plas-Pro please refer to our PDF installation guides and 'How to' videos on:

www.millboard.com/en-gb/installation-guides

Cutting products

Millboard products can be cut with standard wood cutting tools and machinery (i.e. mitre saw, jigsaw, handsaw). We recommend a carbon-tipped (TCT) saw blade. It also mills very cleanly with a router and can be bored or drilled with ease.

It's advisable to connect a dust extraction vacuum to any machine or power cutting tools and to wear an FFP3 dust mask, safety glasses, gloves and long sleeves when working with Millboard.

Make sure that the boards are adequately supported when cutting. Boards can be cut face-up or face-down

We recommend that all ends are squared off with a slight back cut of around 2-3 degrees before they're installed.

Reduced dust cutting: For situations where the creation of dust needs to be kept to a minimum then Millboard can be cut with a hand saw or by using a wet cutting saw such as the Makita DCC5007.18v 125mm dustless Disc cutter with Makita water supply cover and the B-57722. 125mm Tungsten Carbide Grit Blade fitted to a saw rail.

Disposal of Millboard material: Dispose of board off-cuts by disposing as general waste or sending to a municipal incinerator for energy replenishment. Don't burn them at home.



Mitre saw with extraction

Tip:

If there is a breeze/wind when cutting the boards, locate the saw up wind so that excess dust is blown away from the operator & project. Suitable dust extraction/vacuums fitted to saws will help reduce excessive dust.

Fastening to the substructure

Methods of fixing Millboard decking

Use Durafix screws to fasten Millboard. They can be driven through the face of the boards or through the side using the DuoFix side-fixing guide. (6).

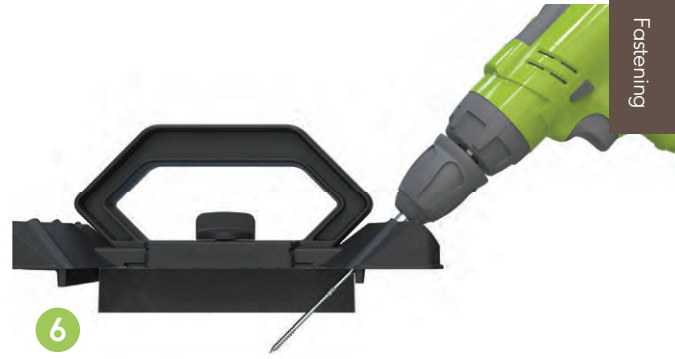
DuoFix Side fixing guide: When using the DuoFix guide, this creates a 6mm gap between boards. DuoFix should be used in accordance with the instructions on the DuoFix box. These can also be found on - www.millboard.com/en-gb/installation-guides

Using Durafix deck and fascia screws

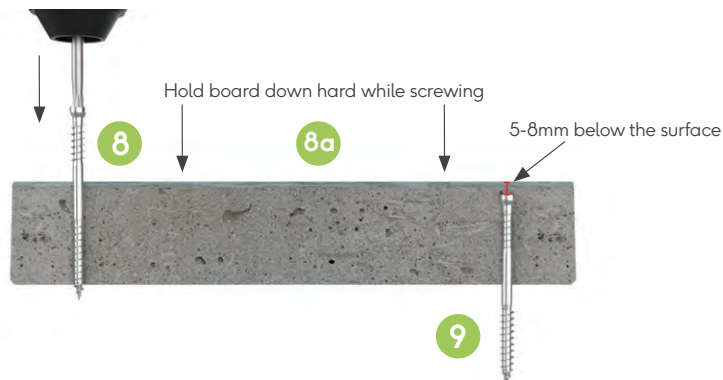
The screws should be given a liberal coating of spray silicone lubricant before use (7). When driving the screws in, push firmly down on the screw as it is driven in. Don't let the screw spin on the surface. (8)

At the same time apply pressure to hold the deck board down onto the subframe, to stop it riding up the screw (8a). Drive the screw head 5-8mm below the surface of the board. This should leave a minimal witness mark (9).

When installing the boards through the face with the Durafix fixings, there is no need to pre-drill or countersink, just drive the screw straight in. We advise using a standard drill driver with the TX15 bit provided and not an impact driver to fix the Durafix screws to the decking as this can damage the Lastane surface leaving a larger mark where the screw has entered. It can also break the drive bit and screw head, as well as impede the board from being fastened directly against the subframe.



DuoFix side-fixing Guide



Silicone spray on Durafix screws



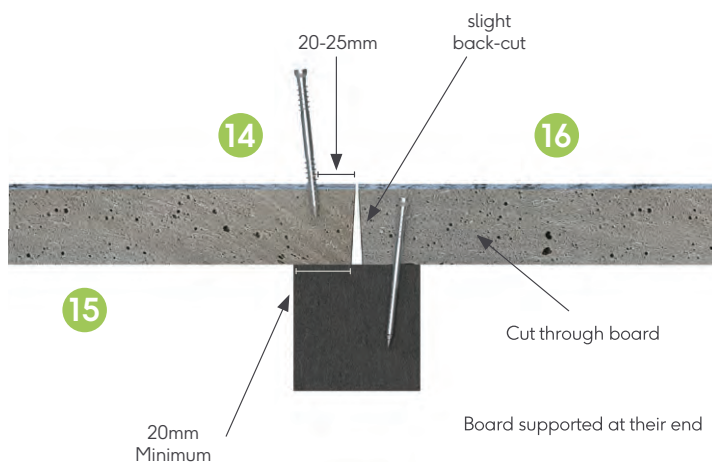
Millboard decking can be installed on to a timber frame using the Durafix 4.5x60mm screws, (10)

When fixing into Plas-Pro (11) or DuoSpan (12) the Durafix 4.5x45mm screws should be used.

When installing the fascia boards to Plas-Pro or timber, that are less than 30mm thick, Durafix 4.5x35mm screws should be used.

Failure to use our DuraFix screws with the bit provided or not fitting according to these guidelines may invalidate the warranty and affect the overall look of the deck. Two screws per board should be used where the board crosses a joist. Use three at the ends of the boards. (13)

The screws at the ends of the boards should be fixed at a slight angle to prevent being too close to the end of the board (14), positioning the screws 20-25mm from the ends and 20mm minimum from the sides of the boards. Board ends should be supported by a minimum of 20mm (15).



Cuts must always be positioned over the joist.

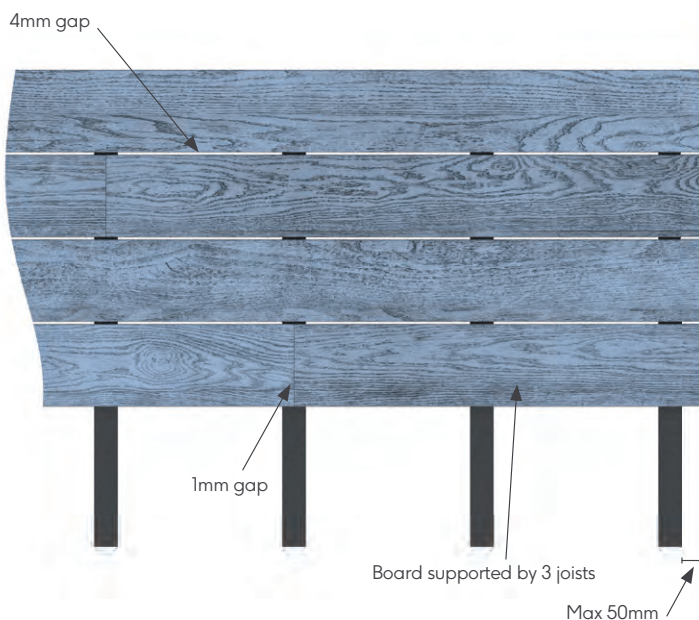
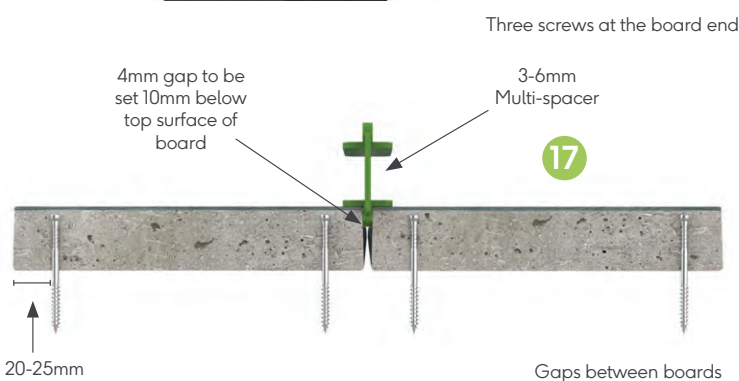
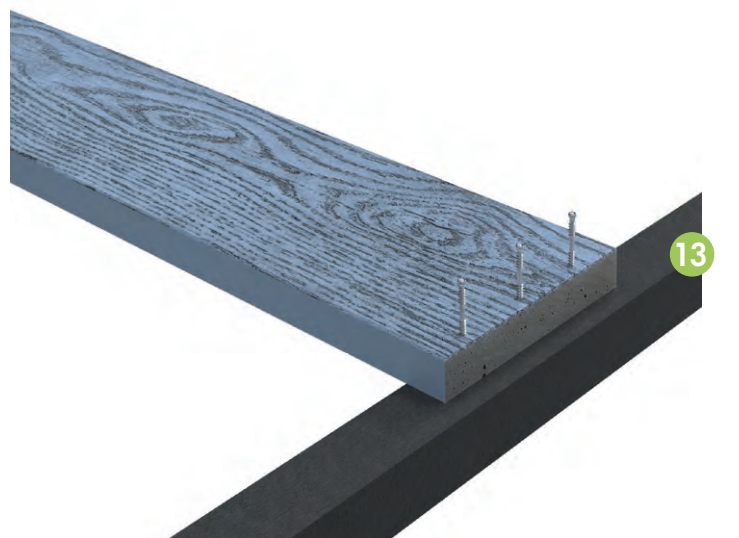
We recommend that all ends are squared off with a slight back cut of around 2-3 degrees before they're installed (16).

This back-cut makes it easier to adjust butt joints if required, by carefully running a handsaw along the gap to make the butt joint square and evenly gapped.

Gapping deck boards

We recommend a 4mm gap between the sides of boards and 1mm gap at the ends on butt joints. The sides of the boards are not always square but have a varied taper, therefore the gap on the side of the board should be set 10mm down from the top of the board to help keep the gaps consistent and the boards running straight. The Multi-spacer (FP36P010) has been specifically designed to work with the boards and provides gap spacing of 3-6mm. (17).

When fitting deck boards using the DuoFix Side Fixing Guide, which creates a 6mm gap between boards.



General gapping on boards

A gap between the boards smaller than 4mm can lead to dirt build-up and can prevent drainage between the boards. It can also lead to the boards rubbing against each other causing a squeaking noise. Gaps bigger than 6/7mm can result in items falling through or getting stuck, such as high heels, children's fingers, rings, keys, etc., as well as exposing more of the joist which is often not the desired look.

A 10mm gap should be left between the deck boards and any solid surface (house wall, door sill, post, garden wall, glass balustrade, etc) to facilitate drainage and allow for any movement. (18)

Whatever gap is used between the deck boards, we recommend maintaining the same gap between the deck boards and any edgings, picture frame or breaker boards, for aesthetic consistency. (19)

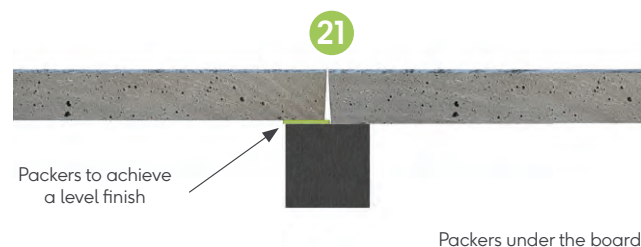
The flexible edgings should always be butted up tight to the deck boards for maximum support. (see page: 13)

Keep boards straight

Always start installing the first row of deck boards to a string line. Fasten the boards at one end then work along the board fixing as you go, adjusting spacing or to the string line as necessary. We recommend checking the boards against a string line every 5th row. As there may be slight variation in width and thickness, packers can be used, or one board can be planed (by a maximum of 2mm), to create a flat finish between two boards. (21)

Tip:

It is best practice to not screw the end of the deck board down until the next board has been offered up to it to check for alignment.

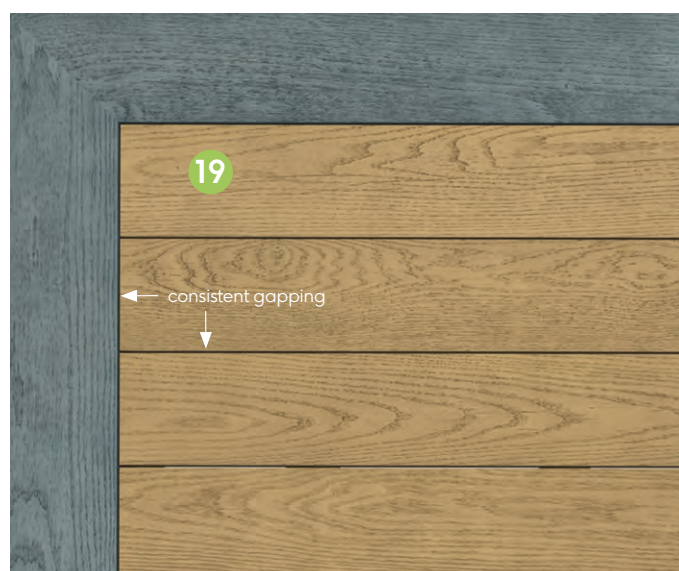


Tip:

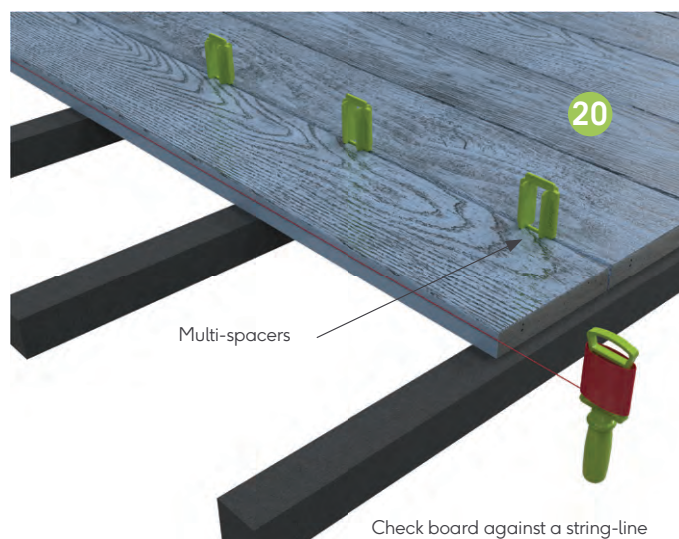
When installing decking over large areas with straight runs, it is sometimes easiest to carefully measure and install every 5th row of boards to a string-line. Then, infill between these with 4 rows of boards, using the multi-spacers, ensure consistent gapping before installing all 4 rows at once.



Gap between boards and solid surfaces



Gap around the edge



Deck Edging & Fascia

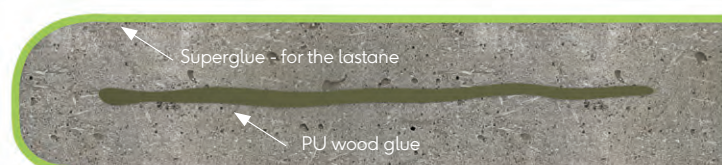
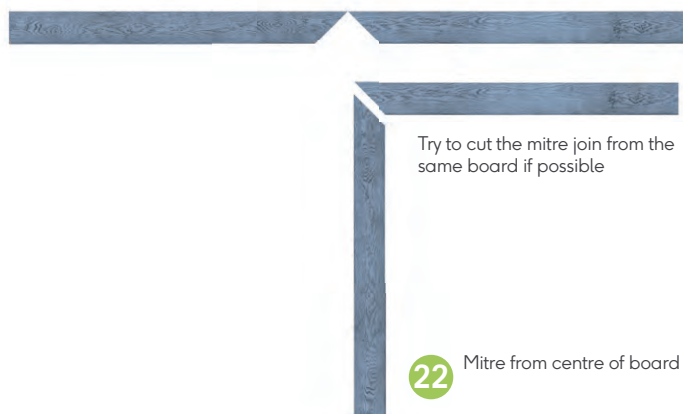
We recommend that our purpose-made edgings are fitted to all steps and perimeters of the deck rather than using a standard deck board. Where the deck edge is likely to sustain impact or wear, such as a step, we do not recommend using a standard square edge deck board.

Any visible cuts need to be coated with Millboard Touch-up Coating. This coating should not be used on the surface of the boards. The edging profiles should sit over the top of any fascia boards used to cover the subframe. (23)

When mitring the edging or fascia profiles for a corner, it is best practice where possible to cut the mitre from the same board to account for natural variance in grain and sizing. (22)

Gluing mitres

All mitred corners must be glued together. We recommend using a thin bead of gel PU wood glue on the core material and a continuous bead of super glue for the Lastane.



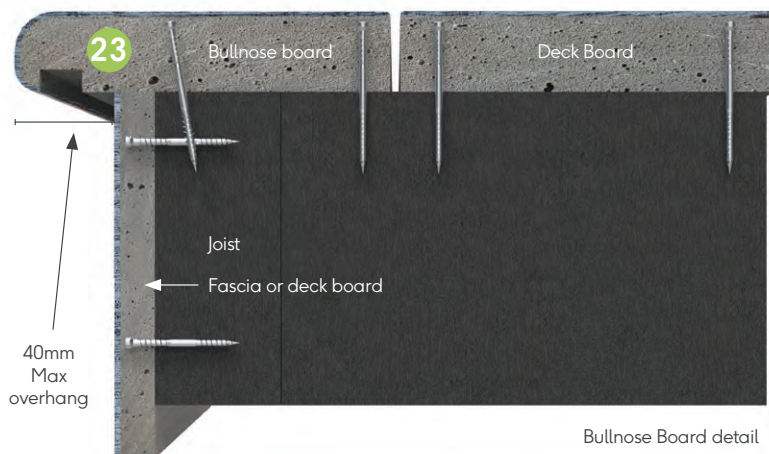
Location of glue on mitres

Fascia boards

Fascia boards are used under the decking or edging profiles to cover the sides of the subframe, they will bend to a radius of 1.2m (at 20°C) and need to be fixed with two Durafix 4.5x35mm screws at 300mm centres.

Joining fascia boards

When two fascia boards meet along the deck, these should be jointed together on a 22.5° angle back cut so that one piece slides under the other. The upward facing cut should be painted with touch-up coating prior to being installed and should not be glued. If a fascia joint finishes on a curve, the boards should be joined on a 45° angle and glued together prior to being fitted in place. Take care to support the glued joint while bending it.



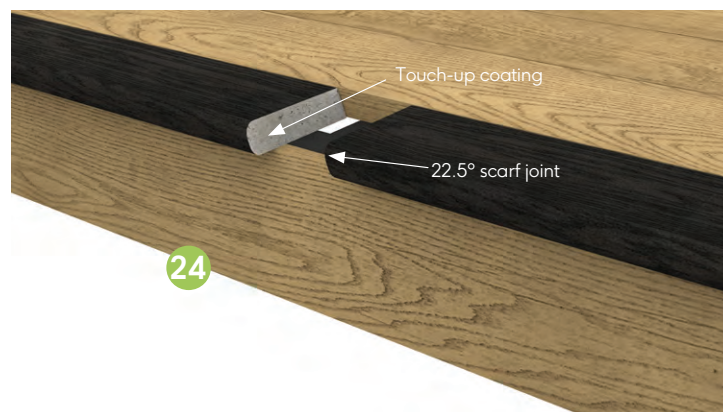
Bullnose Board detail

Bullnose Board Edging

The Bullnose Board is a 150mm wide edging with a bullnosed front edge. It is a rigid product used for straight runs on edges of decks, steps and seating. The maximum overhang of the Bullnose board is 40mm from the front of the fascia. Both the standard deck boards (32mm) and the thinner fascia board (16mm) can be used as a fascia under this product. The maximum size of cut-out for LED lighting under this board should be 17x9mm and should be a minimum of 11mm from the front of the board edge. (23)

Bullnose Board butt joints

These boards would normally be fully supported along their entire length but can span up to 400mm centres and should be installed with two Durafix screws every 300mm. When two Bullnose Boards come together along the deck, these should be joined together on a 22.5° scarf joint so that one piece slides over the other. The upward facing cut should be painted with touch-up coating prior to being installed and should not be glued. (24)



Bullnose Board or Fascia Joint

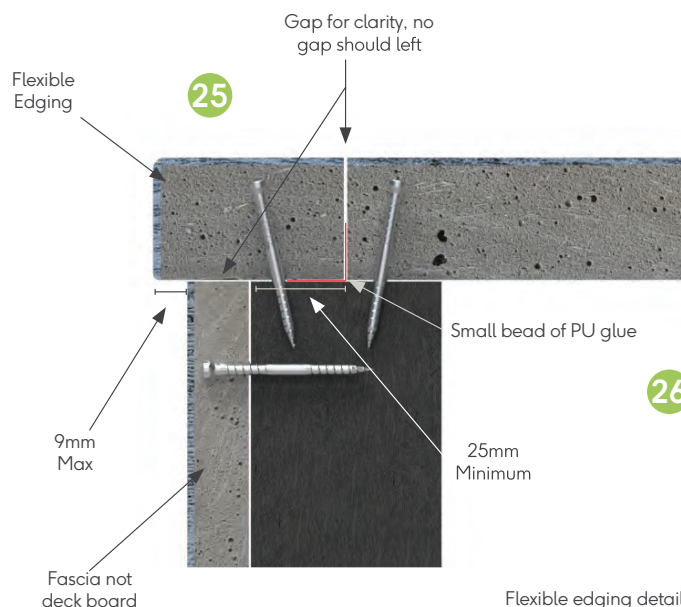
Flexible Edgings

The Flexible edgings are a 50mm wide profile with either a bullnose round or square edge. Use these profiles to add curved details to deck edges, steps and seating edges.

They bend to a 1.2m radius (at 20°C) and need to be fully supported by a joist minimum of 25mm along its entire length, with a maximum overhang of 9mm from the front of the fascia. (25).

Top Tip:

Fix the fascia board slightly higher than the joist and plane down to the joist to create a full flat seat for the edging to sit on.

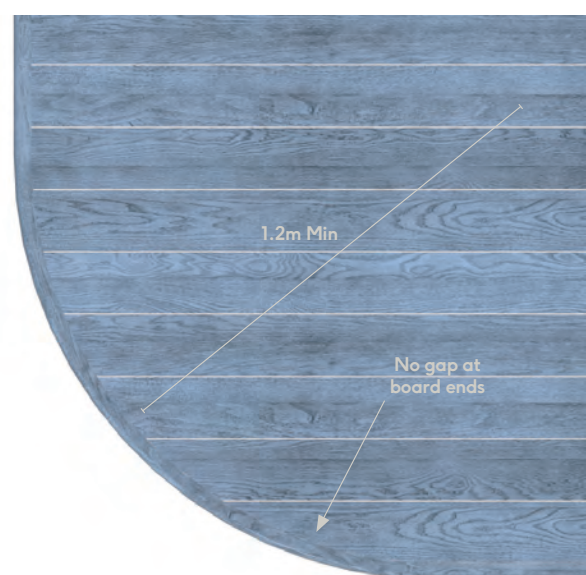


Flexible edging details

When installing the flexible edging, start from the end with a double screw point and work along, screwing at 150-200mm intervals as you go. Some screw holes may be partially visible on the flexible edgings.

Top Tip:

Make sure you use plenty of silicone spray on the screws and keep the downward pressure on the screws for as long as you are driving it in, until the screw head has gone at least 10mm below the surface.



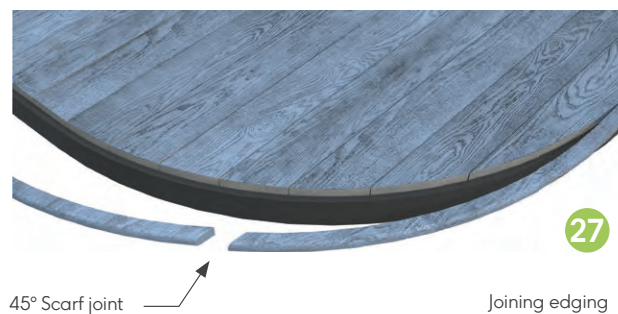
Edging used around a radius

The flexible edging should sit tight up against to the deck boards, this will give it maximum support. Apply a small bead of PU glue at the back before fixing the flexible edging in place. (26).

Flexible Edging Joints

If possible, try to make sure that the joints on flexible edging don't start or finish on a curve. If the radius of the curve is bigger than a full length of edging then pre-glue enough lengths together to run around the curve in one piece. (27).

When joining two lengths of 50mm edging around a curve, it is best to join them on a 45° angle so one fits behind the other. Glue this joint with superglue and hold together for 10-15 seconds. Then continue to screw the flexible edging around the curve.



Taking care

If the board surface becomes dirty during installation, this should be cleaned as soon as possible using warm soapy water (dishwashing liquid) and a brush.

Clean your decking when required to remove leaves and general dirt particles.

Cover the boards from any surrounding building works especially if there are silicone renders being applied. If possible try to complete all rendering at least 2 weeks before decking installation as migration off the walls from rain can still wash down dust onto the deck and stick to the surface release agent on the new boards. Overspray from painting can also mark the surface of the boards. Stubborn marks may be removed with a range of different cleaners depending on the mark. Please contact us for more information on [02476 439 943](tel:02476439943).



Pressure washers can be used carefully on Millboard decking for cleaning and rinsing. We recommend:

- A PSI no greater than 2,000 should be used, with a 40 to 60 degree spread fan tip
- The head should always be kept around 300mm away from the surface
- Please note that using pressure washers may increase the chance of screw holes becoming more visible
- Direct, prolonged and intense contact could damage the surface of the boards

Frequently asked questions

Where can I use Millboard decking?

Millboard decking is extremely versatile and can be used in practically every outdoor space (subject to building control). Create decks, cladding, balconies, roof gardens, boardwalks, bridges, pontoons, seating, steps, planters and more. Millboard can be used as the decorative face for most outdoor designs, as long as it is fixed to a structural element.

Does it expand or contract?

As Millboard is made from a resin mineral composite it is stable in comparison to timber or composites based on wood. The amount of movement that is acceptable is up to 0.2%. We recommend a 4mm gap between the sides of boards and a 1mm gap between the ends of boards, a 10mm gap should be left between the boards and any solid surface to aid drainage.

Why do my boards have water puddling on the surface?

Surface water will always be more prevalent on Millboard due to it being made from a non-porous composition. Laying the boards to a slight fall away from a building will help to drain the water off the surface, though it will not drain all of the water off the boards. Adhere to relevant gapping in this guide to assist drainage, the boards have a cupping tolerance of 2mm. Surface water can be taken off the surface of the boards with a brush or large squeegee. Frost or ice can be removed by spreading white salt across the board surface.

My boards have just been laid and have a slight oily/shiny finish?

As the boards are a moulded product we use a release agent in the manufacturing process so when the boards are first delivered this release agent is still on the surface. This may result in the boards looking like they have a shiny or waxed surface or have small particles of dirt and water puddling. This release agent will come off the surface within 6-8 weeks due to natural weathering.

This process can be accelerated by cleaning the boards with warm soapy water and a stiff brush after installation.

Can you use it for load bearing applications (i.e. structural)?

It is not recommended to use Millboard decking in structural applications. Millboard decking would need to be fixed to a structural frame, either made from DuoSpan, Plas-Pro or timber.

Does Millboard decking get hot in the sun?

As with all composite products, the surface of the boards tends to be hotter than timber when exposed to direct sunlight. Darker colours particularly will feel hotter and may be uncomfortable to walk on in bare feet. Under direct sunlight and high temperature, footwear may be necessary. Special caution should be taken when using decking in areas near heat/UV reflective glass, or around pools.

What tolerances should be allowed?

There will always be a slight variance in the board's dimensions due to the fact that we mould from natural oak, and due to the pressure of the moulding process. Despite this, we calibrate the boards to maintain as consistent a profile as possible. The manufacturing tolerances are: Width: $\pm 3\text{mm}$. Length: $\pm 5\text{mm}$. Thickness: $\pm 2\text{mm}$. The dimensions of the Weathered Oak style may vary more between moulds due to the fact that they are moulded from timeworn oak with minimal changes to the dimensions. When working with the boards, packers may be required to create a flush finish between two boards.

What fixings should be used to fix Millboard decking?

Following extensive trials, we recommend and supply Durafix stainless steel screws, designed specifically for Millboard - this is a requirement of our limited warranty. There's no need to pre-drill or countersink Millboard decking, the unique Lastane material coating flexes back over the screw-heads, leaving a minimal witness mark. This may be more visible on the lighter colours.

Can I use a standard board as an edging piece?

Yes you can, only where the edge is merely aesthetic, such as a balcony edge, if this is your preferred finishing option. However, where the edge is likely to sustain impact, such as a step, we do not recommend using a standard board. Our edging boards have been specifically designed to withstand the knocks and scrapes associated with step edges and other associated applications. In high footfall areas or areas needed contrasting edges, it may be necessary to add metal edging to the edges of the area.

Will heat sources affect my decking boards?

Where heat sources are in prolonged proximity to the boards, the board surface may become affected. We would recommend keeping any heat source 1m away from the board surface. Non-combustible materials should be used in these areas. In instances where there is burning wood or coal, they will need to sit the fire bowl/brazier onto a porcelain or cement tile/slab. The slabbed area needs to extend about 1m outside the fire bowl/brazier. Any embers or burning material needs to be removed immediately to prevent any damage or lasting marks to the Millboard surface. Patio heaters or infra red heaters are not known to affect the boards.

Does Millboard decking come with a warranty?

Yes Millboard provide a UK-backed Residential 25 year Limited Warranty or a Commercial 10/12 year Limited Warranty on decking products, to provide customers with piece of mind. Register your warranty at www.millboard.com/en-gb/limited-structural-warranty-registration

Something else?

For any other technical, installation or care questions:

- Visit www.millboard.com
- Call our Technical Team on **024 7643 9943**
- Email us at technical@millboard.co.uk

Live. Life. Outside.



The Millboard Company Ltd
UK Head Office
1 Argosy Court,
Scimitar Way,
Coventry
CV3 4GA

T: +44 (0) 24 7643 9943
E: enquiries@millboard.co.uk

millboard.com



Company registered No. 06061318
VAT No: 980 616602

© 2024 The Millboard Company Ltd., Millboard®, Lastane®, Durafix®, Lasta-Grip®, DuoSpan®, DuoLift®, Envello® and the phrase "Live. Life. Outside.™" are protected trademarks. Patents and Patents Pending apply to Millboard® products. The company will vigorously defend its patent rights. Due to printing restraints, actual colours may vary from those shown in brochure. This brochure is not to be reproduced or copied without written permission from Millboard directors. Millboard has a policy of continual improvement to specification. Product blend, colours and sizes may change without notice. All sizes and measurements are nominal. Information is correct at time of going to press. Patent numbers include GB 2445714, GB 2449184, USA 8,065,849, CAN 2664329, EU 1951971.

2024v1

The background of the image shows a modern outdoor deck installation. In the foreground, a metal joist system is being laid out on a green lawn. The joists are dark grey and connected by metal brackets. Above the joists, several wooden planks are laid out, showing the finished look of the deck. In the background, there is a large window or glass door with a grey frame, set into a wall with a stone-like texture. The overall scene is bright and clear, suggesting a sunny day.

millboard

Live. Life. Outside.

Installation Guide for **DuoSpan™** Joists & Beams

Considerations

Considerations should be made prior to starting installation on the design of the deck:

Does it include edging, a board or Bullnose Board around the perimeter?

Does the design include area to be split up in different sections?

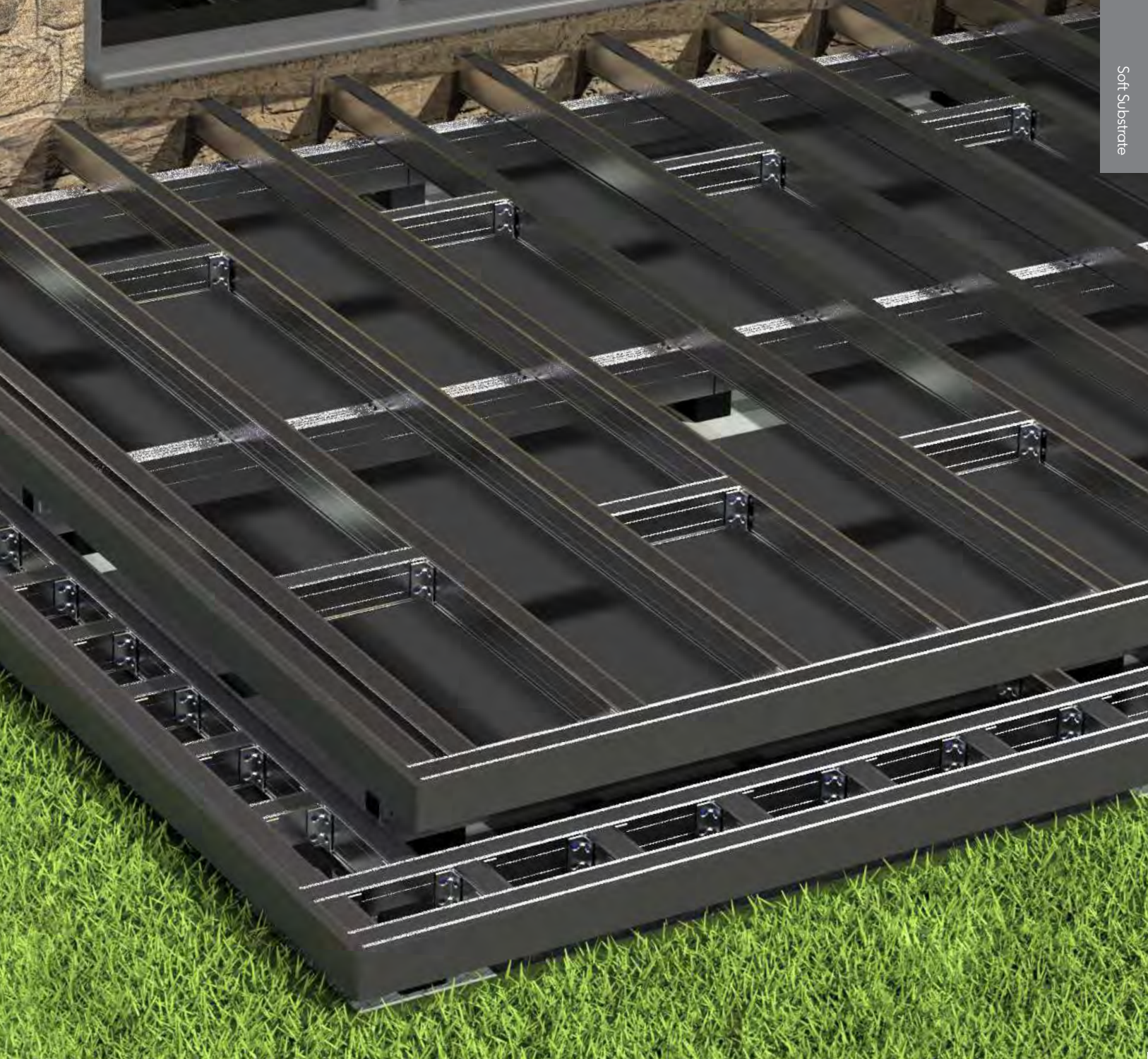
Are the boards being laid at 90 degrees or 45 degrees?

Are the boards being laid with a herringbone or a mitre?

Does the deck have a curve?

Does it need to have access hatches for drainage outlets etc?

Picture-board design	Alternative colour inlay design	Herringbone design
Mitre or chevron design	Mitre to a board design	Curved design



DuoSpan™ Joists & Beams Installed at ground level (soft substrate)

Simple guide for installing DuoSpan 99mm Joists & 136mm Beams with Plas-Pro Posts, to be read in conjunction with the Millboard Installation Guide when using Millboard decking boards.

1



- Excavation of the ground to get to the required height to be carried out first.
- Lay a weed membrane over the area.
- Ground pins will be needed to hold the membrane down.

2



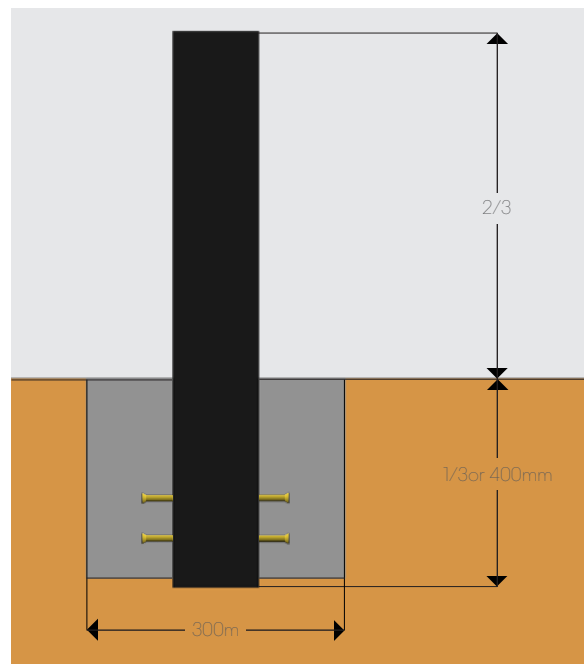
- When the weed membrane is down, mark out your decking area and where the Plas-Pro Posts should be placed.
- If any steps are to be installed, these will need to be factored in at this point.
- Make sure you consider the board dimensions when doing so as this will make the installation easier further down the line.
- If the installation is for a domestic application, then we advise having a maximum of 1800mm gap between the Post centres.
- The maximum recommended span for commercial applications is 1350mm, however as the DuoSpan Joists and Beams are 3600mm long it is more efficient to set the Posts at 1200mm centres.
- Whilst these are our recommended spans full loading tables can be found on - www.millboard.co.uk/duospan

3



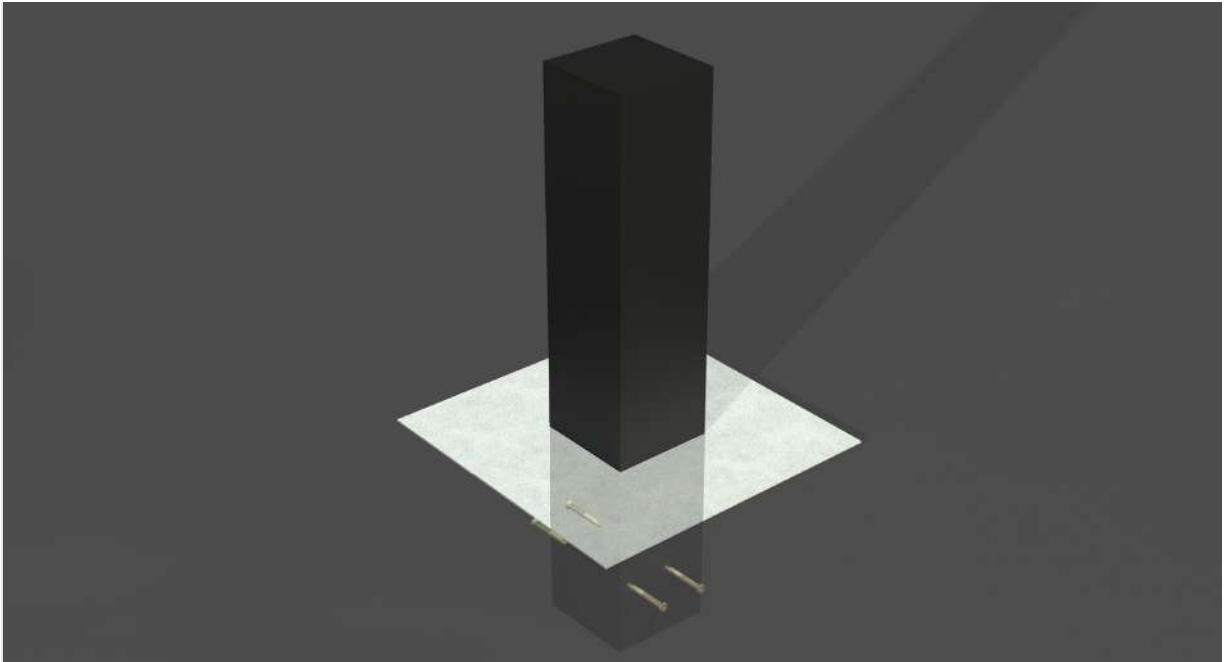
- Cut the weed membrane on the marked area.
- Proceed to dig the holes to house the Plas-Pro Posts, which will support the deck.

4



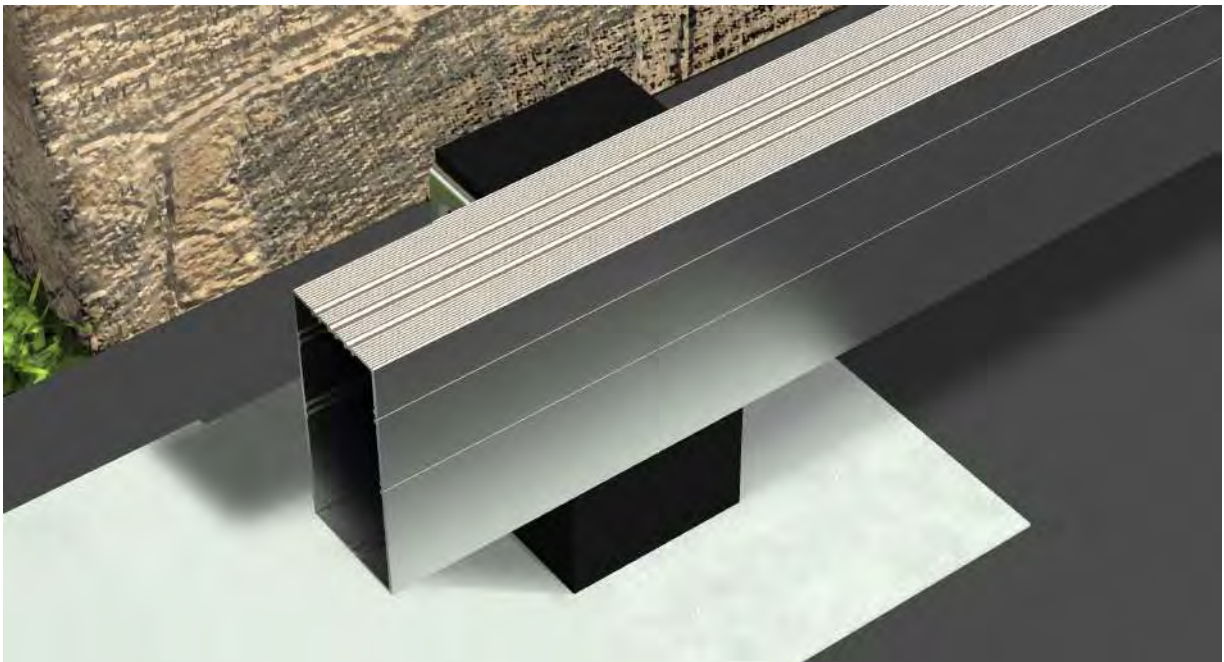
- The Plas-Pro Posts should be two thirds above ground and one third, or a depth of 400mm, in the ground, whichever is greatest.
- We recommend the hole is three times the width of the Post, i.e. 300mm x 300mm for a 100mm Post.
- It is best to oversize the post length slightly then cut once it has been secured in place.
- Plas-Pro Posts can be cut using a normal mitre saw, preferably with a TCT blade that has fewer teeth.
- When cutting it is advised to wear safety glasses, gloves and ear defenders.

5



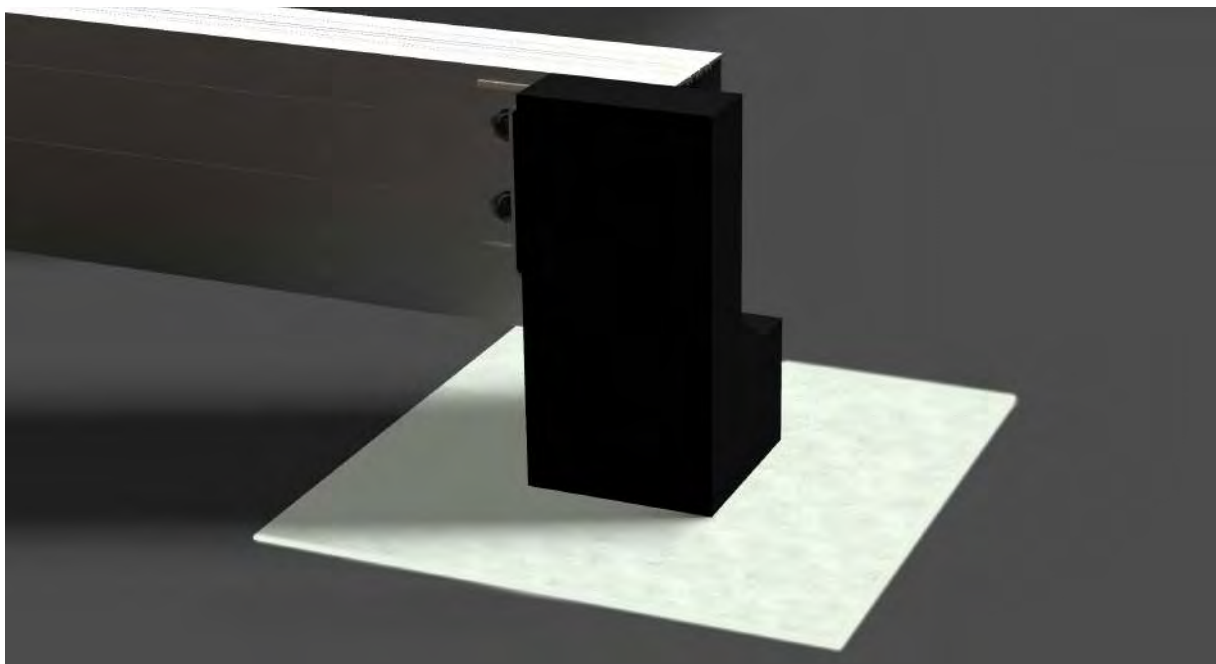
- At this point you could choose to add postcrete to secure the Plas-Pro Posts in place, they may need supporting in position whilst this sets.
- Alternatively, you could support the Posts in place to allow continual work on the deck frame and apply the postcrete at a later stage, this would be typical of an elevated deck over 600mm in height.
- To prevent the Plas-Pro Post from lifting out of the concrete, screws can be put in to the four sides of the base of the Post to create a hold in the concrete.

6



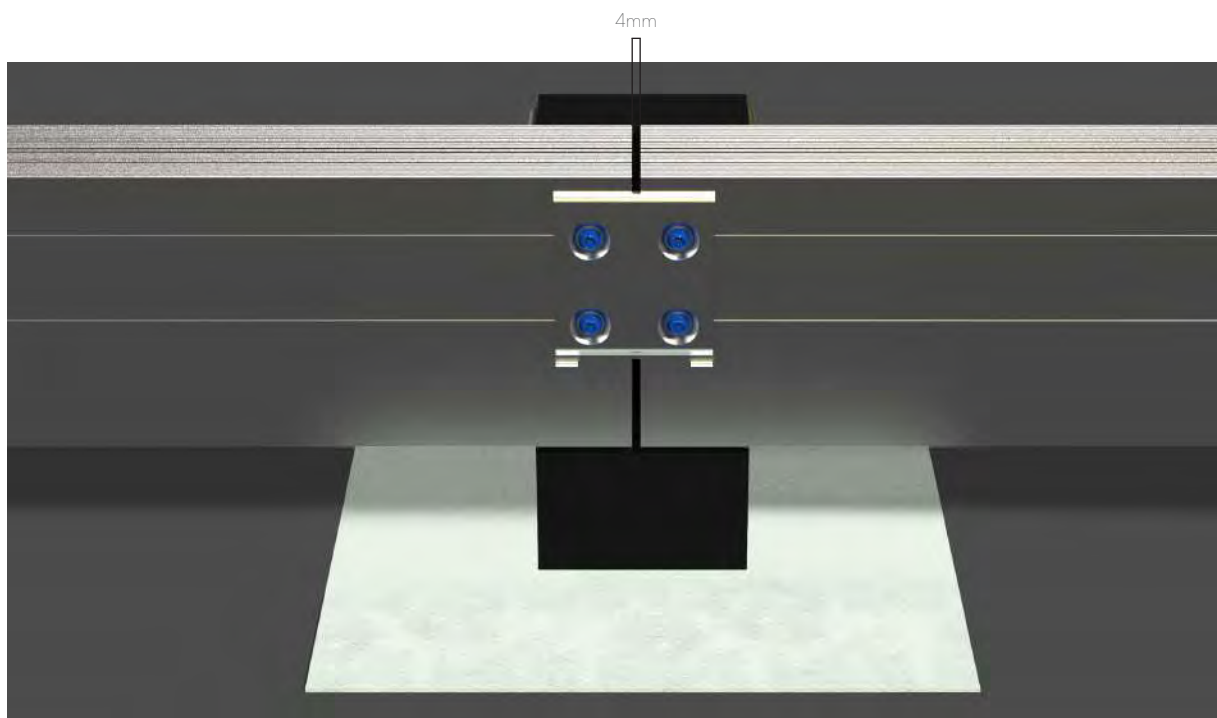
- The first DuoSpan Beam to be installed is the one nearest the house, we recommend this first Beam is set 200mm from the house supported by Plas-Pro Posts into the ground.
- The Beams need to be set so the three grooves are at the top, this will aid installation later.
- The DuoSpan Beams & Joists can be cut using a mitre saw with an aluminium cutting blade.
- Alternatively they can be cut in situ with a disc cutter with an aluminium cutting disk, do not use the same disk that has been used to cut steel as this could shatter the disk.
- When cutting the DuoSpan Joists & Beams we recommend that FFP3 dust masks, gloves, goggles, and noise-reducing ear pieces are worn.

7



- Continue to fix the DuoSpan Beams to the Plas-Pro Posts, parallel to the first Beam at the correct centres.
- It is best practice to take a 130x60mm notch out of the top of the Posts to sit the Beam in, then use the DuoSpan 99 Flexible Bracket to either side of the Post, fixing to the Post using the DuoSpan Pan-head Screws provided. A reciprocating saw can be used to cut the notch to the top of the Post.

8



- Where two DuoSpan Beams meet on a Plas-Pro Post, a 4mm gap needs to be left to allow for potential movement.
- A DuoSpan 99 Straight Connector can be fixed to the side of both Beams to hold at the same level.

9



- Now the DuoSpan Beams are in place DuoSpan 99mm Joists can be installed across the top.
- The Joists are installed with a DuoSpan Hold-down Clip on either side.

300/400mm

10



- For a residential application we recommend the DuoSpan 99mm Joists are set at 400mm centres.
- For a commercial application we recommend the joist centres are reduced to 300mm.
- This is based on the boards being set at 90 degrees to the Joists, if they are at 45 degrees to the Joists the joist centres need to be reduced to 300mm and 240mm respectively.
- Please note these are the recommendations if Millboard decking is being used, if an alternative decking product is being used the joists spacing may be different according to their specifications.

11



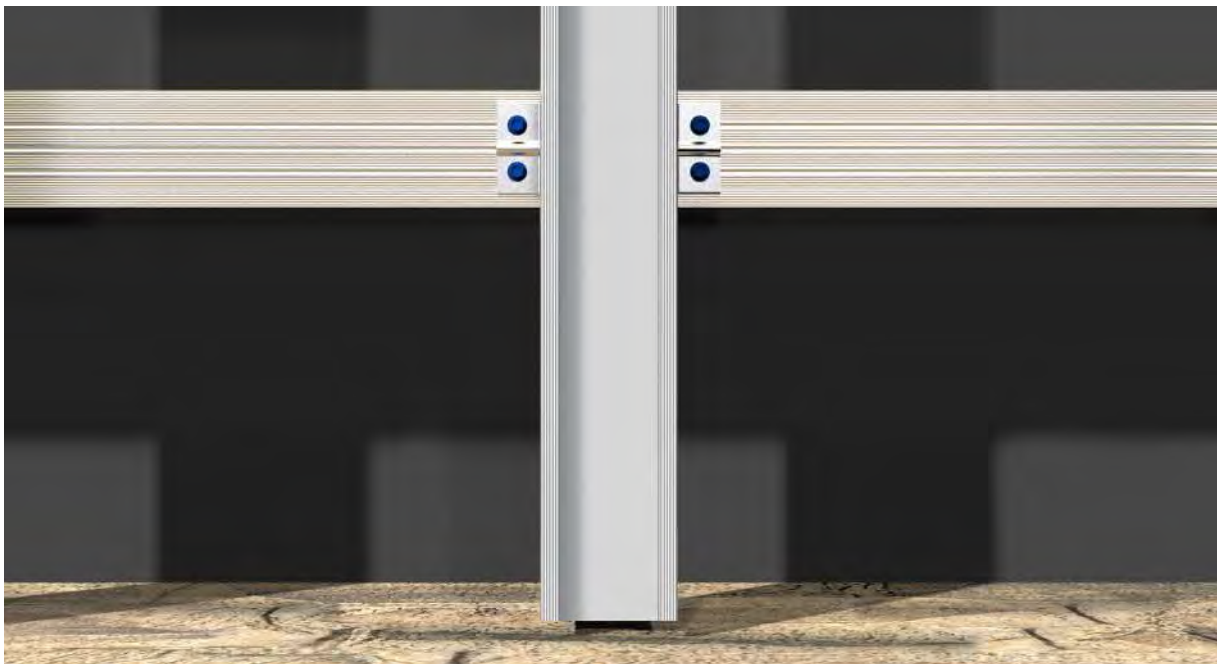
- Consideration should be taken at this point on whether the deck will have a board around the outside as a picture frame or a Bullnose Board, as the back of this board will need to be supported.

12



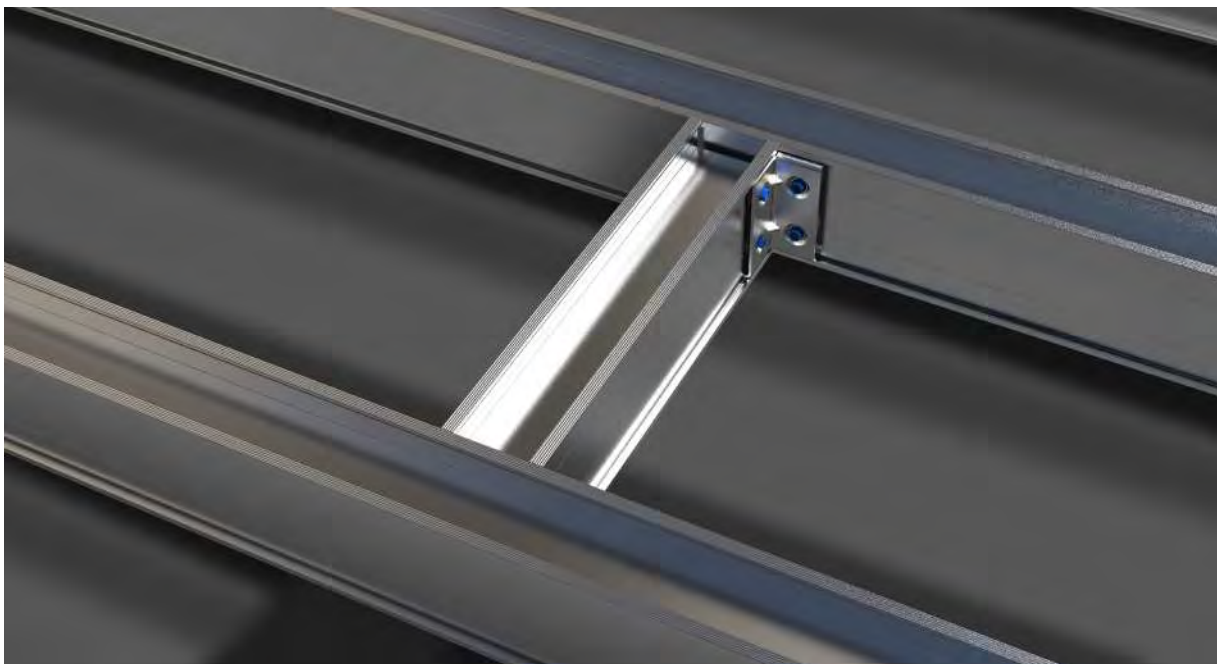
- DuoSpan Joists around the edge without a DuoSpan Hold-down Clip on both sides will need DuoSpan 51 90° Angle Brackets to the underside, attached to the DuoSpan Beam or additional noggins between the last and second to last joist to prevent any twisting.

13



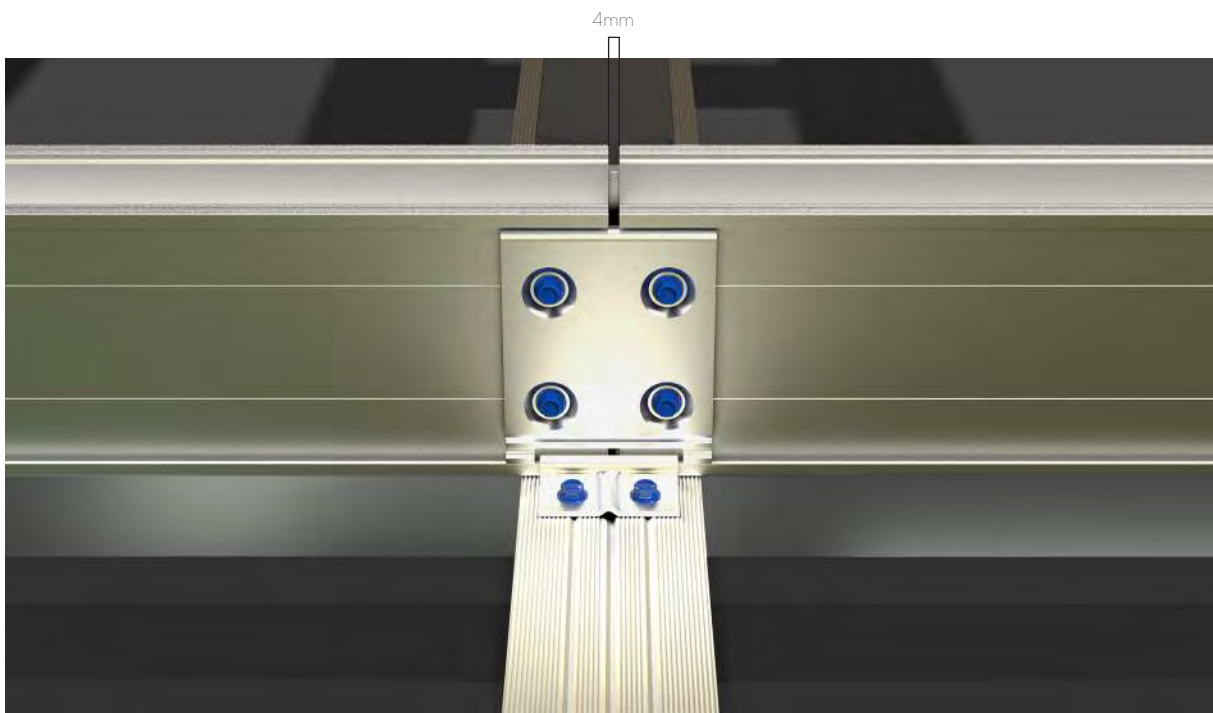
- The Joists need to be spaced 10mm from any fixed item (walls, door sills).

14



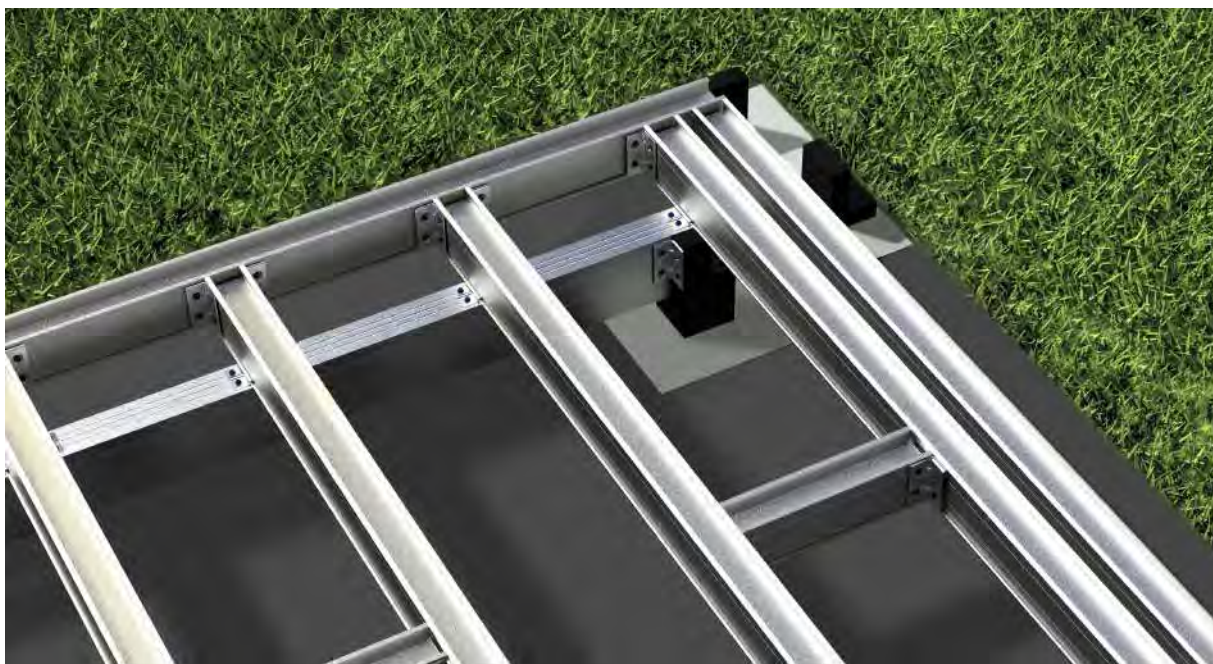
- Noggins are recommend for joist running lengths over 3.6m not attached to an outer frame, used in areas where there may be the potential risk of imposed loads causing buckling or twisting of the Joists or Beams.
- The noggins are installed with DuoSpan 99 90° Angle Brackets either side of the noggin.

15



- When joining two lengths of DuoSpan 99mm Joists a DuoSpan 99 Straight Connector should be used with a 4mm gap between butt ends.
- These joins must be supported underneath by the DuoSpan 136mm Beam except if used around the outside edge.

16



- The DuoSpan 99mm Joists can be attached to an outer frame using the DuoSpan 99 90° Angle Brackets for 90° joints, or the DuoSpan 99 Flexible Brackets.

17



- If the design incorporates a curve the Plas-Pro Fascia Support can be used to create the curve, the DuoSpan Joists can be fixed into this using the DuoSpan 99 Flexible Brackets.
- Noggins may be needed at the furthest point of this curve to hold it in place.
- To aid the installation of curves, pieces of Plas-Pro can be fixed into the cavity of the DuoSpan Joists for the Plas-Pro Fascia Support to be fixed to. The DuoSpan 99 Flexible Brackets must also be used in conjunction with this.

18



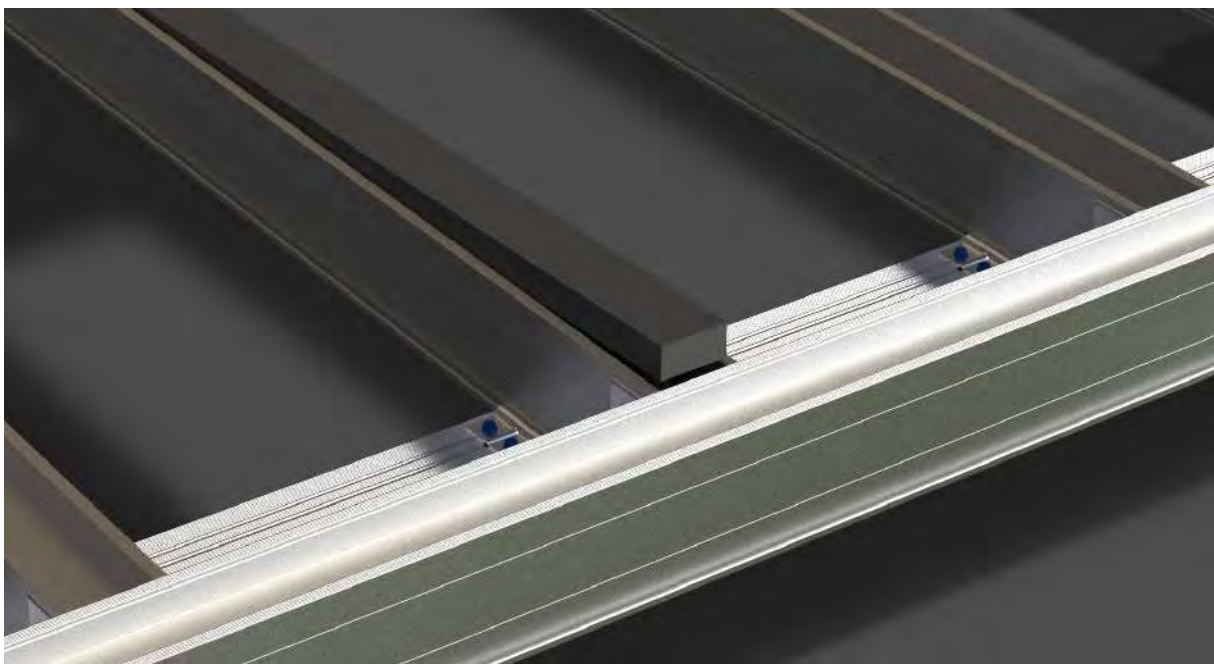
- The steps are built by constructing an outer frame first of DuoSpan Joists and inserting Joists along at the appropriate intervals.
- These frames are then attached to the Plas-Pro Posts in the ground and attached back to the DuoSpan Beams using DuoSpan 99 90° Angle Brackets.

19



- If the front of the deck is more than 1 step high and requires more than 1 fascia board, the framework should be adequate to support this.

20



- Once all of the DuoSpan Joists are laid out, the DuoSpan Joist Insert can be laid inside the channel.
- The channels may need to be cleared to prevent any dirt lifting the insert.
- The DuoSpan Joist Insert is tapered, it is important that these Joist Inserts are put into the joist with the tapered part at the bottom.
- If the project is exposed to high wind loads we recommend screwing the Joists Inserts in to the Joists at the end using the Plas-Pro to DuoSpan Screws.

21



- Plas-Pro Fascia Support should be fixed to the outer Joist to fix the fascia and edging profiles to a 6.5mm hole should be pre-drilled through the Fascia Support with a HSS bit.
- The Plas-Pro to DuoSpan Screws should be used to fix to the Joists, with two fixings every 600mm along the Plas-Pro.

22



- When two lengths of DuoSpan Joist Insert or Plas-Pro Fascia Support come together a 10mm expansion gap must be left at butt ends.



- Now you have installed the subframe you can begin to install the boards.
- When fixing Millboard to the DuoSpan framework Durafix 4.5x45mm fixings must be used to fix the boards down. Durafix 4.5x35mm fixings must be used to fix the fascia to the Plas-Pro Fascia Support.
- As the DuoSpan profiles are made from aluminium this may be visible in the gaps between the boards, over time these will become less visible. 100mm DPC can be applied to the top of the Joists so the Joists can't be seen in the gaps between the boards.

Other Considerations:

- Where lighting is needed on the deck, any access holes in the Joist need to be done where the Joist is over the top of the Beam, access holes in the Beam need to be where the Beam is supported by the Plas-Pro Post.
- Where the framework will be touching or near to electricity cables, the framework will need to be earthed suitably.

DuoLift

DuoLift unpacked

Contents	Box Quantity	Heights	Material	Box code
A DuoLift Joist Cradle	10	15 - 60mm	Glass filled nylon	PMCP010
B DuoLift Self-Levelling Joint	10	20mm	Glass filled nylon	PMLP010
C DuoLift Riser	10	45mm	Glass filled nylon	PMRP010
D DuoLift Foot	10	45mm	Glass filled nylon	PMFP010
E DuoLift Acoustic Separation Pad	10	3mm	Agglomerated cork & rubber	PMAP010



A



B



C



D



E

DuoSpan

DuoSpan profiles

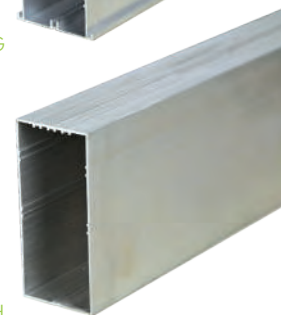
Contents	Dimensions	Material	Code
F DuoSpan 51mm Joist	51 x 68 x 3600mm	Aluminium	K5168J360
G DuoSpan 99mm Joist	99 x 68 x 3600mm	Aluminium	K9968J360
H DuoSpan 136mm Beam	136 x 63 x 3600mm	Aluminium	K1363B360



F



G



H

DuoSpan insert

Contents	Dimensions	Material	Code
I DuoSpan Joist Insert	25 x 54 x 2400mm	Recycled plastic	K2554B240



I

Plas-Pro

Contents	Dimensions	Material	Code
J Plas-Pro Fascia Support	100 x 25 x 3000mm	Recycled plastic	P0210B300
K Plas-Pro Post	100 x 100 x 3000mm	Recycled plastic	P1010B300



J

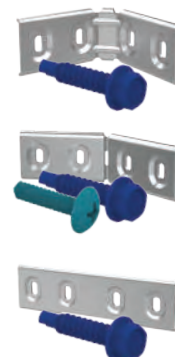


K

Accessories and fixings

Joist bracket sets for DuoSpan 51mm Joist

Contents	Quantity	Dimensions	Material	Box code
DuoSpan 51 90° Angle Bracket	10	–	Aluminium	K51RP010
DuoSpan Hex-head Screw	42	5.5 x 25mm	Cathodic barrier coated s/s	
DuoSpan 51 Flexible Bracket	10	–	Aluminium	K51FP010
DuoSpan Hex-head Screw	42	5.5 x 25mm	Cathodic barrier coated s/s	
DuoSpan Pan-head Screw	20	5 x 25mm	Cathodic barrier coated s/s	
DuoSpan 51 Straight Connector	10	–	Aluminium	K51LP010
DuoSpan Hex-head Screw	42	5.5 x 25mm	Cathodic barrier coated s/s	



Joist bracket sets for DuoSpan 99mm Joist

Contents	Quantity	Dimensions	Material	Box code
DuoSpan 99 90° Angle Bracket	10	–	Aluminium	K99RP010
DuoSpan Hex-head Screw	42	5.5 x 25mm	Cathodic barrier coated s/s	
DuoSpan 99 Flexible Bracket	10	–	Aluminium	K99FP010
DuoSpan Hex-head Screw	42	5.5 x 25mm	Cathodic barrier coated s/s	
DuoSpan Pan-head Screw	20	5 x 25mm	Cathodic barrier coated s/s	
DuoSpan 99 Straight Connector	10	–	Aluminium	K99LP010
DuoSpan Hex-head Screw	42	5.5 x 25mm	Cathodic barrier coated s/s	



Hold-down clip

Contents	Quantity	Dimensions	Material	Box code
DuoSpan Hold-down Clip	30	–	Aluminium	K48CP030
DuoSpan Hex-head Screw	63	5.5 x 25mm	Cathodic barrier coated s/s	



Plas-Pro profile fixings

Contents	Quantity	Dimensions	Material	Box code
DuoSpan Bracket to Plas-Pro Screw	100	5 x 25mm	Cathodic barrier coated s/s	FD25P100
Plas-Pro to DuoSpan Screw	100	5 x 50mm	Cathodic barrier coated s/s	FD50P100



millboard.co.uk

© 2020 The Millboard Company Ltd. Millboard®, Lastane®, Durafix®, Lasta-Grip®, DuoSpan®, DuoLift® and the phrase "Live. Life. Outside.™" are protected trademarks. Patents and Patents Pending apply to Millboard® products. The company will vigorously defend its patent rights. Due to printing restraints, actual colours may vary from those shown in brochure. This brochure is not to be reproduced or copied without written permission from Millboard directors. Millboard has a policy of continual improvement to specification. Product blend, colours and sizes may change without notice. All sizes and measurements are nominal. Information is correct at time of going to press. Patent numbers include GB 2445714, GB 2449184, USA 8,065,849, CAN 2664329, EU 1951971.

The Millboard Company Ltd
UK Head Office
Unit A, Castle Court
Bodmin Road
Coventry CV2 5DB

T +44 (0) 24 7643 9943
F +44 (0) 24 7661 1668
E enquiries@millboard.co.uk

Company registered No. 06061318
VAT No: 980 616602



APPENDIX B

Planning decision notice
Asbestos management survey

DECISION NOTICE

Application Ref: AB/24/24/L

1 To Addressee

Mr Matthew Brockhurst
78 Lower Street
Pulborough
RH20 2AA

2 Site Address

Town Hall
Maltravers Street
Arundel
BN18 9AP

3 Description of Development

Listed building consent for the replacement of decking and associated access steps to roof terrace to include localised repairs to perimeter parapet wall.

4 In pursuance of their powers under this Act and the Regulations the Council **GRANT** Listed Building Consent, Consent for the works as described to be carried out in accordance with the application and plans and subject to compliance with the conditions specified below.

If the works approved involve a measure of demolition applicants are reminded of their obligation under Section 8(2)(c) of the Planning (Listed Buildings and Conservation Areas) Act 1990 to give at least one months notice of their intention to carry out the work to Historic England, London and South East Regional Office, 4th Floor, Cannon Bridge House, 25 Dowgate Hill, London EC4R 2YA [Email: londonseast@HistoricEngland.org.uk](mailto:londonseast@HistoricEngland.org.uk)

- 1 The works for which Listed Building Consent is hereby granted must be begun not later than the expiration of 3 years beginning with the date of this consent.

Reason: To comply with Section 18 of the Planning (Listed Building and Conservation Areas) Act 1990.

- 2 The works hereby consented shall be carried out in accordance with the following approved plans:
 - Location and Block Plans PL01
 - Existing and Proposed Floor Plan PL02
 - Proposed Parapet Plans PL04
 - Heritage Statement 2400/21/HER

- Design and Access Statement 2400/21/DAS

Reason: For the avoidance of doubt and to protect the heritage asset in accordance with Arun Local Plan policy HER DM1.

- 3 At all times during the progress of the work hereby approved adequate measures shall be taken to protect the remaining part of the Listed Building from collapse and/or structural damage.

Reason: To preserve the character and appearance of the Listed Building in accordance with HER DM1 of the Arun Local Plan and the NPPF.

- 4 Upon completion of the work for which Listed Building Consent is hereby granted any damage caused to the fabric of the building shall be made good to the satisfaction of the Local Planning Authority.

Reason: To preserve the special character and appearance of the building for the future in accordance with Arun Local Plan policy HER DM1 and the NPPF.

- 5 The repairs to perimeter parapet wall for which consent is hereby granted shall be carried out as far as may be practicable with original materials. Any variation from the original materials must be with the written approval of the Local Planning Authority.

Reason: To preserve the appearance and special character of the building for the future in accordance with HER DM1 of the Arun Local Plan and the NPPF.

INFORMATIVE: This consent does not purport or be deemed to grant consent for any buildings or structure within the curtilage of the Listed Building for which a separate application for planning permission is required under the provisions of the Town and Country Planning Act 1990 (as amended).



Neil Crowther
Group Head of Planning

Case Officer: Hannah Riddle

Decision Issued: 25th April 2024

Arun District Council
The Arun Civic Centre
Maltravers Road
Littlehampton
West Sussex BN17 5LF

IT IS IMPORTANT THAT YOU READ THE NOTES ATTACHED TO THIS DOCUMENT

APPEALS TO THE SECRETARY OF STATE

If the applicant is aggrieved by the decision of the local planning authority to refuse listed building consent or to grant consent subject to conditions, he may appeal to the Secretary of State in accordance with section 20 of the Planning (Listed Buildings and Conservation Areas) Act 1990 within six months of receipt of this notice.

Appeals must be using a form which you can get from the Secretary of State at Temple Quay House, 2 The Square, Temple Quay, Bristol BS1 6PN (Tel: 0303 444 5000) or online at <http://acp.planninginspectorate.gov.uk>

The Secretary of State can allow a longer period for giving notice of an appeal but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.

PURCHASE NOTES

If listed building consent is refused, or granted subject to conditions, whether by the local planning authority or by the Secretary of State, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any works which have been or would be permitted, he may serve on the council of the district in which the land is situated, a purchase notice requiring that council to purchase his interest in the land in accordance with the provisions of section 32 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

In certain circumstances a claim may be made against the local planning authority for compensation where permission is refused or granted subject to conditions by the Secretary of State on appeal or on a reference of the application to him. The circumstances in which such compensation is payable are set out in section 27 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

Please note that this decision notice only relates to matters under the Planning Acts and does not give consent under any other legislation that may apply to the development. You will need to carry out your own checks to determine whether any other consents or permissions are required. For example, the Building Regulations are likely to apply to most developments, and a Highways Licence may be required from West Sussex County Council for any development within the public highway (including the placing of skips on highway land).