Sudley House Basement Repairs

17 November 2017

C20 Demolition

5 SURVEY

- Scope: Before starting deconstruction/ demolition work, examine available information, and carry out a survey of:
 - the structure or structures to be deconstructed/ demolished,
 - the site on which the structure or structures stand, and
 - the surrounding area.
- Report and method statements: Submit, describing:
 - Form, condition and details of the structure or structures, the site and the surrounding area.

Extent: Removal of basement subfloor.

- Type, location and condition of features of historical, archaeological, geological or ecological importance.
- Type, location and condition of adjoining or surrounding premises that might be adversely affected by removal of the structure or structures or by noise, vibration and/ or dust generated during deconstruction/ demolition.
- Identity and location of services above and below ground, including those required for the Contractor's use, and arrangements for their disconnection and removal.
- Form and location of flammable, toxic or hazardous materials, including lead-based paint, and proposed methods for their removal and disposal.
- Form and location of materials identified for reuse or recycling, and proposed methods for removal and temporary storage.
- Proposed programme of work, including sequence and methods of deconstruction/ demolition.
- Details of specific pre-weakening required.
- Arrangements for protection of personnel and the general public, including exclusion of unauthorized persons.
- Arrangements for control of site transport and traffic.
- Special requirements: Disposal methods for gypsum-based products and Site waste management plan development and proposals.

10 EXTENT OF DECONSTRUCTION/ DEMOLITION

 General: Subject to retention requirements specified elsewhere, deconstruct/ demolish structures down to levels as shown on drawing.

20 FEATURES TO BE RETAINED

• General: Keep in place and protect the following: skirting and timber surrounds.

25 LOCATION OF SERVICES

- Services affected by the Works: Locate and mark positions.
- Mains services marking: Arrange with the appropriate authorities for services to be located and marked.

30 SERVICES DISCONNECTION ARRANGED BY CONTRACTOR

 Responsibility: Before starting deconstruction/ demolition arrange with the appropriate authorities for disconnection of services owned by those authorities and removal of associated fittings and equipment.

45 SERVICES TO BE RETAINED

- Damage to services: Give notice, and notify relevant service authorities and/ or owner/ occupier regarding damage arising from deconstruction/ demolition.
- Repairs to services: Complete as directed, and to the satisfaction of the service authority or owner.

50 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 deconstruction/ demolition to be used.

76 ASBESTOS-CONTAINING MATERIALS – UNKNOWN OCCURENCES

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

78 UNFORESEEN HAZARDS

- Discovery: Give notice immediately when hazards, such as unrecorded voids, tanks, chemicals, are discovered during deconstruction/ demolition.
- · Removal: Submit details of proposed methods for filling, removal, etc.

85 SITE CONDITION AT COMPLETION

- Debris: Clear away and leave the site tidy on completion.
- Special requirements: ensure all finished surfaces within the basement wher works or materials have been transported are cleaned down.

C52 Fungus/ beetle eradication

5 SURVEY AND REPORT

- Survey generally:
 - Purpose: To ascertain nature and extent of fungal/ beetle attack. To ascertain sources and extent of any dampness.
 - Timing: Before starting eradication work carry out survey and submit survey report.
- · Survey report content:
 - Description of method of investigation.
 - Factors affecting execution of the work: Identify problematic site conditions and restrictions including the presence of bats, barn owls, other protected species or breeding birds.
 - Laboratory results identifying attacking organisms. Plan and section drawings or annotated photographs, defining extent of attack.
 - Proposals for eradication treatments and procedures, including measures to halt damp penetration and promote drying out.
 - Measurements of wood moisture content, with identification of instances above 20%.
 - Identification of neighbouring buildings that may be involved in attack.
 - Associated work: Nature and extent of repair/ replacement work required to load bearing constructions and to the building fabric in general.
 - Other information: Any considered relevant.

12 ASSOCIATED WORK

· Work shown to be necessary by survey: Carry out as part of main contract works.

15 DRYING OUT OF BUILDING FABRIC

- Drying conditions: Establish as soon as possible.
- Drying methods: Submit proposals.

26 FUNGAL ATTACK

- · Dry rot:
 - Fruiting bodies: Spray with fungicide. Remove carefully and clean affected surfaces.
 - Infected materials to be removed: Remove carefully without disturbance or damage to adjacent building fabric; dispose of safely.
- Wet rot:
 - Decayed timber to be removed: Cut out until sound timber is reached.
- Infected/ decayed material to be retained: Obtain instructions.

37 TIMBER PRESERVATIVES/ MASONRY FUNGICIDES GENERALLY

- Products: Registered by the Health and Safety Executive (HSE) and listed on the HSE website under non-agricultural pesticides.
- Application: In accordance with statutory conditions of approval given on product labels and manufacturer's recommendations.

42 TIMBER PRESERVATIVE TREATMENT TO BEAMS

- Preservative type: Contractor's choice.
- · Tint: Not required.
- Treatment method: Beam bearings: Injection.

62 PROPRIETARY MASONRY FUNGICIDE TREATMENT

- Manufacturer: Contractor's choice.
 - Product reference: Peter Cox Treatment no 4.
- Tint: Not required.
- Treatment method: To suit location and scale of fungal attack.

70 GUARANTEE

- Type: Insured protection. Administered by an independent insurance protection company.
 - Guarantee period from completion of installation (minimum): 20 years.
- Documentation: Provide certificates/ guarantees at completion of treatment.

C90 Alterations - spot items

GENERAL

10 DESCRIPTIONS

· Location of spot item descriptions: Schedule of work.

20 EMPLOYER'S PROPERTY

- Components and materials arising from alterations that are to remain the property of the Employer: None.
 - Protection: Maintain until items listed above are removed by the Employer or reused in the Works, or until the end of the Contract.

30 RECYCLED MATERIALS

- Materials arising from alterations: 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.

D20 Excavating and filling

35 EXCESS EXCAVATIONS

- · Excavation taken wider than required: Backfill N/A.
- · Excavation taken deeper than required: Backfill with well graded granular material .

40 SURPLUS EXCAVATED MATERIAL

- Topsoil: Spread and level on site N/A.
- · Remaining material: Remove from site.

50 HAZARDOUS, AGGRESSIVE OR UNSTABLE MATERIALS

• Generally: Do not import or use fill materials which would, either in themselves or in combination with other material or ground water, give rise to a health hazard, damage to building structures or instability in the filling.

55 PLACING FILL GENERALLY

- Excavations and areas to be filled: Free from loose soil, rubbish and standing water.
- Freezing conditions: Do not use frozen materials or materials containing ice. Do not place fill on frozen surfaces
- Fill against structures, membranes or buried services: Place and compact in a sequence and manner which will ensure stability and avoid damage.

65 HARDCORE

- Fill: Granular material, free from harmful matter and excessive dust or clay, well graded, all pieces less than 75 mm in any direction, and in any one layer only one of the following:
 - Crushed hard rock or quarry waste.
 - Crushed concrete, brick or tile, free from plaster.
 - Gravel or hoggin.
- Filling: Spread and level both backfilling and general filling in layers not exceeding 150 mm. Thoroughly compact each layer.

75 BLINDING TO HARDCORE

- Surfaces to receive sheet overlays or concrete: Blind with:
 - Concrete where shown on drawings; or
 - Sand, fine gravel, or other approved fine material applied to provide a closed smooth
- Permissible deviation on surface level: +0 -25mm.

E10 Mixing/ Casting/ Curing in situ concrete

15 SPECIFICATION

- Concrete generally: To BS 8500-2.
- Exchange of information: Provide concrete producer with information required by BS 8500-1, clauses 4 and 5.

20 DESIGNATED CONCRETE Basemet Store room B.02

- · Designation: GEN1.
- · Fibres: Not required.
- · Aggregates:
 - Size (maximum): 20 mm.
 - Coarse recycled aggregates: Contractor's choice.
 - Additional aggregate requirements: None.
- Special requirements for cement/ combinations: None.
- · Consistence class: S2.
- · Chloride class: Normal.
- · Admixtures: None.
- · Additional mix requirements: None.

45 PROPERTIES OF FRESH CONCRETE

• Adjustments to suit construction process: Determine with concrete producer. Maintain conformity to the specification.

50 PREMATURE WATER LOSS

- Requirement: Prevent water loss from concrete laid on absorbent substrates.
 - Underlay: Polyethylene sheet 250 micrometres thick.
 - Installation: Lap edges 150 mm.

60 PLACING AND COMPACTING

- Surfaces to receive concrete: Clean, with no debris, tying wire clippings, fastenings or free water.
- Timing: Place as soon as practicable after mixing and while sufficiently plastic for full compaction.
- Temperature limitations for concrete: 30°C (maximum) and 5°C (minimum). Do not place against frozen or frost covered surfaces.
- Compaction: Fully compact to full depth to remove entrapped air especially around reinforcement, cast-in accessories, into corners of formwork and at joints. Continue until air bubbles cease to appear on the top surface.
 - Methods of compaction: To suit consistence class and use of concrete.

70 CURING AND PROTECTING

- Evaporation from surfaces of concrete: Prevent throughout curing period.
 - Surfaces covered by formwork: Retain formwork in position and, where necessary to satisfy curing period, cover surfaces immediately after striking.
 - Top surfaces: Cover immediately after placing and compacting. Replace cover immediately after any finishing operations.
- · Curing periods:
 - Surfaces which in the finished building will be exposed to the elements, and wearing surfaces of floors and pavements: 10 days (minimum).
 - Other structural concrete surfaces: 5 days (minimum).
- · Protection: Protect concrete from shock, indentation and physical damage.

E41 Worked finishes to in situ concrete

10 FINISHING

- Timing: Carry out at optimum times in relation to setting and hardening of concrete.
- · Prohibited treatments to surfaces:
 - Wetting to assist surface working.
 - Sprinkling cement.

30 TROWELLED FINISH

• Surface on completion: Uniform, smooth but not polished, free from trowel marks and blemishes, and suitable to receive specified flooring material.

J40 Flexible sheet waterproofing/ damp proofing

10 SOFT BLINDING TO HARDCORE BEDS

- Material: Soft sand.
 - Thickness (minimum): 50 mm.
 - Finish on completion: Smooth, consolidated bed free of sharp projections.

20 LOOSE LAID POLYETHYLENE DAMP PROOFING

- Substrate: Soft blinded hardcore.
- Membrane:
 - Manufacturer: Contractor's choice. Product reference: Agrément certified .
- Thickness/ Gauge: 300 micrometres (1200 gauge).
- Recycled content: Contractor's choice.
- Joints:
 - Surfaces to be joined: Clean and dry beyond full width of joint.
 - Laps (minimum): End and side, 150 mm.
 - Sealing: Continuous mastic strip between overlaps, edge of top sheet sealed with jointing tape.

50 WORKMANSHIP GENERALLY

- · Condition of substrate:
 - Clean and even textured, free from voids and sharp protrusions.
 - Moisture content: Compatible with damp proofing/ tanking.
- Air and surface temperature: Do not apply sheets if below minimum recommended by membrane manufacturer.
- · Condition of membrane at completion:
 - Neat, smooth and fully supported, dressed well into abutments and around intrusions.
 - Completely impervious and continuous.
 - Undamaged. Prevent puncturing during following work.
- Permanent overlying construction: Cover membrane as soon as possible.

M20 Plastered/ Rendered/ Roughcast coatings

42 PROPRIETARY PLASTER Limelite Renovating Plaster

- Substrate: Brick.
 - Preparation: as specified.
- · Manufacturer: As specified.
- · Undercoats:
 - Product reference: as specified.
 - Thickness (excluding dubbing out and keys): as specified.
- · Final coat:
 - Product reference: as specified.
 - Thickness: as specified.
 - Finish: as specified.

65 MIXING

- · Render mortars (site-made):
 - Batching: By volume using gauge boxes or buckets.
 - Mix proportions: Based on damp sand. Adjust for dry sand.
- Mixes: Of uniform consistence and free from lumps.

67 COLD WEATHER

- Internal work: Take precautions to prevent damage to internal coatings when air temperature is below 3°C.
- External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising.

71 SUITABILITY OF SUBSTRATES

General: Suitable to receive coatings. Sound, free from contamination and loose areas.

74 EXISTING DAMP AFFECTED PLASTER/ RENDER

- Plaster affected by rising damp: Remove to a height of 300 mm above highest point reached by damp or 1 m above dpc, whichever is higher.
- · Perished and salt contaminated masonry:
 - Mortar joints: Rake out.
 - Masonry units: Submit proposals.
- · Drying out substrates: Establish drying conditions.

76 REMOVING DEFECTIVE EXISTING PLASTER

- Plaster for removal: Loose, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
- · Removing plaster: Cut back to a square, sound edge.

78 REMOVING DEFECTIVE EXISTING RENDER

- Render for removal: Detached, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
- Removing defective render: Cut out to regular rectangular areas with straight, square cut or slightly undercut edges.
 - Render with imitation joints: Cut back to joint lines.
- Cracks (other than hairline cracks): Cut out to a width of 75 mm (minimum).

87 APPLICATION OF COATINGS

- General: Apply coatings firmly and achieve good adhesion.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
 - Accuracy: Finish to a true plane with walls and reveals plumb and square.
- Drying out: Prevent excessively rapid or localized drying out.
- Keying undercoats: Cross scratch (plaster coatings) and comb (render coatings). Do not penetrate undercoat.

93 CURING AND DRYING OF RENDER COATINGS

- Curing: Keep each coat damp by covering with polyethylene sheet and/ or spraying with water
 - Curing period (minimum): as specified.
- Drying: Allow each coat to dry thoroughly, with shrinkage substantially complete before applying next coat.

99 RENDER FINAL COAT - PLAIN FLOATED FINISH

• Finish: Even, open texture free from laitance.

M60 Painting/ clear finishing

10 EMULSION PAINT TO INTERNAL PLASTERED SURFACES

- · Manufacturer: Dulux.
 - Product reference: Contractor's choice.
- Surfaces: plaster.
 - Preparation: Submit method statement.
- Initial coats: 10% thinned primer.
 - Number of coats: 1.
- Undercoats: As recommended by manufacturer.
 - Number of coats: 1.
- · Finishing coats: Matt vinyl.
 - Number of coats: 2.

14 EGGSHELL/ SATIN PAINT TO INTERNAL EXPOSED SOFTWOOD

- · Manufacturer: Dulux.
 - Product reference: Contractor's choice.
- · Surfaces: Previously decorated.
 - Preparation: Submit method statement.
- Initial coats: Etching primer.
 - Number of coats: 1.
- Undercoats: As recommended by manufacturer.
 - Number of coats: 1.
- · Finishing coats:
 - Number of coats: 2.

16 DECORATIVE WOODSTAIN/ VARNISH/ PRESERVATIVE to identified internal doors

- Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
- · Surfaces: doors.
 - Preparation: Submit method statement.
- Initial coats: 1.
 - Number of coats: As recommended by manufacturer.
- Finishing coats: varnish.
 - Number of coats: 2.

25 SURFACES NOT TO BE COATED

• wall paper, varnished suerfaces not identified in specification .

26 SURFACES TO BE CLEANED BUT NOT COATED

- All decorated surfaces except wall papers.
- Suspected hazardous materials: submit method statement.

30 PREPARATION GENERALLY

- · Standard: In accordance with BS 6150.
- Refer to any pre-existing CDM Health and Safety File and CDM Construction Phase Plan where applicable.
- 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 or other hazardous materials.
 - 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: Ironmongery, coverplates, grilles, wall clocks, and other surface mounted fixtures.
- 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.

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.

61 COATING GENERALLY

- Application standard: 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.

Z10 Purpose made joinery

10 FABRICATION

- Standard: To BS 1186-2.
- Sections: Accurate in profile and length, and free from twist and bowing. Formed out of solid unless shown otherwise.
 - Machined surfaces: Smooth and free from tearing, wooliness, chip bruising and other machining defects.
- · Joints: Tight and close fitting.
- · Assembled components: Rigid. Free from distortion.
- Screws: Provide pilot holes. Heads of countersunk screws sunk at least 2 mm below surfaces visible in completed work.
- Adhesives: Compatible with wood preservatives applied and end uses of timber.

20 CROSS SECTION DIMENSIONS OF TIMBER

- · General: Dimensions on drawings are finished sizes.
- · Maximum permitted deviations from finished sizes:
 - Softwood sections: To BS EN 1313-1.
 - Hardwood sections: To BS EN 1313-2.

30 PRESERVATIVE TREATED WOOD

- Cutting and machining: Completed as far as possible before treatment.
- Extensively processed timber: Retreat timber sawn lengthways, thicknessed, planed, ploughed, etc.
- Surfaces exposed by minor cutting and/ or drilling: Treat as recommended by main treatment solution manufacturer.

40 MOISTURE CONTENT

 Wood and wood based products: Maintained within range specified for the component during manufacture and storage.

50 FINISHING

- Surfaces: Smooth, even and suitable to receive finishes.
 - Arrises: Eased unless shown otherwise on drawings.
- End grain in external components: Sealed with primer or sealer as section M60 and allowed to dry before assembly.

Z12 Preservative/ fire retardant treatment

10 TREATMENT APPLICATION

- Timing: After cutting and machining timber, and before assembling components.
- Processor: Licensed by manufacturer of specified treatment solution.
- Certification: For each batch of timber provide a certificate of assurance that treatment has been carried out as specified.

20 COMMODITY SPECIFICATIONS

• Standard: Current edition of the Wood Protection Association (WPA) publication 'Industrial wood preservation specification and practice'.

25 PRESERVATIVE TREATMENT SOLUTION STRENGTHS/ TREATMENT CYCLES

 General: Select to achieve specified service life and to suit treatability of specified wood species.

35 WATER-BASED ORGANIC PRESERVATIVE TREATMENT

- Solution:
 - Manufacturer: Submit proposals.
 Product reference: Submit proposals.
 - Application: High pressure impregnation.
- Moisture content of wood:
 - At time of treatment: Not more than 28%.
 - After treatment: Timber to be surface dry before use.

Z20 Fixings and adhesives

10 FIXINGS AND FASTENERS GENERALLY

- Integrity of supported components: Select types, sizes, quantities and spacings of fixings, fasteners and packings to retain supported components without distortion or loss of support.
- Components, substrates, fixings and fasteners of dissimilar metals: Isolate with washers or sleeves to avoid bimetallic corrosion.
- General usage: To recommendations of fastener manufacturers and/ or manufacturers of components, products or materials fixed and fixed to.
- Fixings: To be in straight lines, at regular centres.

25 FASTENER DURABILITY

- · Materials: To have:
 - Bimetallic corrosion resistance appropriate to items being fixed.
 - Atmospheric corrosion resistance appropriate to fixing location.
- · Appearance: Submit samples on request.

30 FIXINGS THROUGH FINISHES

• Penetration of fasteners and plugs into substrate: To achieve a secure fixing.

35 PACKINGS

- · Materials: Noncompressible, corrosion proof.
- · Area of packings: Sufficient to transfer loads.

40 CRAMP FIXINGS

- Fasteners: Fix cramps to frames with screws of same material as cramps.
- · Fixings in masonry work: Fully bed in mortar.

50 PELLETED COUNTERSUNK SCREW FIXINGS

- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.
- Pellets: Cut from matching timber, grain matched, glued in to full depth of hole.
- · Finished level of pellets: Flush with surface.

55 PLUGGED COUNTERSUNK SCREW FIXING

- Finished level of countersunk screw heads: Minimum 6 mm below timber surface.
- Plugs: Glue in to full depth of hole.
- · Finished level of plugs: Projecting above surface.

60 APPLYING ADHESIVES

- Surfaces: Clean. Regularity and texture to suit bonding and gap filling characteristics of adhesive.
- Support and clamping during setting: Provide as necessary. Do not mark surfaces of or distort components being fixed.
- Finished adhesive joints: Fully bonded. Free of surplus adhesive.

Z22 Sealants

31 JOINTS generally

• 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.