



**THE NATIONAL ARCHIVES KEW RICHMOND SURREY TW9 4DU
Q1 REPOSITORY 0 FITOUT:**

**MINIMUM PERFORMANCE SPECIFICATION FOR NEW MOBILE & STATIC RACKING
(IN COMPLIANCE WITH BS 4971:2017)**

Read in conjunction with HTP Architecture drawings RK/01 & RK/02C

HTP Ref. 21008/R/SP3

REQUIREMENTS FOR SHELVING

- Shelves to be formed in dry and oil-free steel, certified to quality standard EN 1013. Epoxy-polyester powder coated to 55690 SP-EP. Average layer thickness: 35 µm
- Colours: shelving in RAL 9002 (Smoke-White) carriage in RAL 7016 (Black)
- 30mm wide box section uprights – double skinned perforated type
- 33mm high flanged shelf (BS 4971: 2017 5.6.4)
- Each shelf to incorporate top hat section centre brace to underside of shelf for additional strength
- Folded or boxed sections are to be powder coated before being formed, to ensure complete coating
- Static and mobile runs must include an unperforated top cover to prevent dust and debris falling on the contents (BS 4971: 2017 5.6.1)
- Loading to comply with deflection tolerance of L/200 (as BS 4971: 2017 5.6.3)
- Triple folded safe edged shelves supported on four clips. Clips to be concealed within shelf flange
- Shelf height must be easily adjustable without tools or specialist skill (BS 4971: 2017 5.6.1)
- Uprights to have a face dimension of 30mm. Load capacity 800kg
- System is to allow vertical shelf adjustment in increments of 20mm – to match existing installations at The National Archives

- Cross-bracing to be fitted to the spines of the shelving (every third bay – other bays to be open)
- Shelves and uprights of new system to be compatible with existing Compactus Shelving Systems already installed on sit

MECHANICALLY ASSISTED MOBILE RACKING SYSTEM

- Design of mobile racking system must be in accordance with BS 4971:2017
- Racking supplier/installer is to supply and install a raised infill floor over the entire area of the repository, including ramps as shown on drawing RK/02C. All ramps are to be delineated with yellow & black hazard markings. Plywood used in floor build-up must be certified formaldehyde-free and sealed with 3 no. coats of Dacrylate Clear Acrylic Glaze ref. 103M-LINE, matt finish and applied in accordance with manufacturer's recommendations – spray, brush or roller applied. Final floor finish (by installer) should be terrazzo- style with a slip resistance greater than 40 PTV. Floor area of REP 0 is approx. 1100m².
- Floor deflection to be compliant with section 5.6.6 of BS 4971:2017
- System is to include load warning notices to advise users (as section 5.6.6. BS4971:2017)
- Static racks are to be mounted on static bases/carriages to maintain an equal height line throughout
- Carriages manufactured in cold rolled steel, incorporating two pairs of guide wheels and the appropriate number of running wheels. Minimum acceptable carriage height/thickness 150mm (as BS 4971:2017)
- Guide rails must be closed sections, not channel sections, to avoid build-up of debris
- Mobile runs must operate from a positive/direct drive "Chain set in floor". Friction drive systems are not permitted
- 25mm rubber buffers to be fitted between all carriages. Floor stops to be fitted to static racks
- Galvanised cold rolled steel rails, 60 x 14mm, with plain, flat surface and levelled to 1:1000mm (BS 4971: 2017 5.6.6)
- Raised floor (approx. 50mm high) with ramps as shown on HTP drawing RK/02C to be supplied and installed by racking manufacturer/installer. Non-slip floor finish required. Plywood underlay/build-up to be sealed.

- Racking movement by rotating ergonomic 3-spoke drive handle mounted at the end of each carriage. Handles to have spinner knobs to allow continuous movement
- Powder coated décor panels to the end of each carriage and static rack – colour TBA
- One pull-out shelf to be included in each mobile carriage
- System design must allow all racks in a bank of mobile carriages to be moved simultaneously from one handle.
- Safety immobiliser locks must be fitted to every mobile carriage (BS 4971: 2017 5.6.6)