

KINGSPAN ACCESS FLOORS LIMITED
K41 SPECIFICATION
FDEB 38 EXTRA HEAVY GRADE, 600MM - 1200MM FFH

K41 Raised Access Floors. To be read in conjunction with Preliminaries / General conditions.

130 **RAISED ACCESS FLOOR TO** computer rooms.

Drawing reference(s): *Specify applicable drawing references*

Sub-Floor: In-situ concrete finished to a fine to medium tamp finish

Preparation: Apply sealer as Clause 280

Flooring system: FDEB38 gravity lay fully removable and interchangeable encapsulated chipboard core panels. Panel dimensions are 600 mm square with a thickness of 40mm. The panel construction comprises of a high strength chipboard core laminated on its top and bottom faces with galvanised steel. The top surface is then covered with the required vinyl or high pressure laminate. The panel sides are then finished with an edge banding which provides protection to the panel and surface covering edges. These panels are supported on Alpha III all steel fully adjustable pedestals complete with retaining lug and anti vibration cap. 3mm Galvanised steel bolt-on stringers will be installed between the pedestal heads to increase lateral stability and structural performance of the system. This raised floor system is fully compliant with the extra heavy grade requirements of the PSA MOB PF2 PS/SPU specification. The installed mass of the system is 54kg/m² approximately.

Manufacturer and reference: Kingspan Access Floors Ltd
Tel: 01482-781701.

Finished floor height above sub-floor (nominal): *Specify as appropriate*

Floor finish(es): Static dissipative vinyl or HPL as specified in clause M50/130. This will be factory bonded to the floor panels.

Accessories: *Specify as appropriate*

Other requirements: *Specify as appropriate.*

GENERAL / PERFORMANCE

219 GENERAL PERFORMANCE:

Completed installation; Clean and stable, free from bounce and vibration.

223 STRUCTURAL PERFORMANCE:

- Static Loads:
 - Uniformly distributed load; 12kN/m²
 - Concentrated Load; 4.5kN to comply with MOB PF2 PS/SPU.
 - Area of load; 25 x 25mm
 - Deflection (maximum); 2.4mm
 - Safety Factor; 3
- Dynamic Loading
 - Absorption of hard body impacts; as required by MOB PF2 PS/SPU
 - Absorption of soft body impacts; as required by MOB PF2 PS/SPU
 - Rolling loads; not required.

234 FIRE PERFORMANCE:

- Reaction to fire; As required by MOB PF2 PS/SPU
 - Standard: BS 476-7
 - Class: 0
- Resistance to fire; As required by MOB PF2 PS/SPU
 - Standard: BS 476-6
 - Period of resistance: Fire propagation index less than 12 and sub index less than 6.

239 SOUND TRANSMISSION:

- Laboratory system test: In accordance with BS EN ISO 140-12.
 - Airborne sound insulation: 42dB
 - Impact sound insulation: 68dB

- Test report: Submit.

COMPONENTS

310 SAMPLES:

- General: Submit representative samples of the following;
FDEB38 floor panel with representative surface covering and pedestal of appropriate height complete with 3mm bolt-on stringer.
- Purpose: Client approval.

315 FLOOR PANELS:

To computer room areas.

- Panel size: 600 x 600 x 40mm thick
- Tolerances: To MOB PF2 PS/SPU
- Life expectancy, excluding coverings (minimum): 25 years
- Casing material: Steel
 - Casing finish: Galvanised
- Core material: High density particle board
- Weight of removable panels: 16kgs approx
- Floor panel fixing: Gravity lay
- Floor panel location method: Positive

320 PEDESTALS:

To computer room areas.

- Life expectancy, excluding coverings (minimum): 50 years
- Pedestal fixing; Kingspan pedestal adhesive, Pedfix 2000.
- Adhesive fixing:
 - Selection of test specimens: In line with T42 requirements
 - T42 Test results: Submit
 - Adhesive: Compatible with subfloor finishing
- Mechanical fixing:
 - Use two fixings at floor heights above 400mm in addition to adhesive fixing
 - Use two mechanical fixings in addition to adhesive fixing if T42 tests show failures
- Adjustability:
 - Limits on adjustability; Vertical adjustment of pedestal head.
 - Locking: Required.
- Additional pedestals: At door thresholds, columns and other cut panel edges as applicable.
- Pedestal materials: Zinc plated steel construction.

325 STRINGERS:

To computer room areas.

- Type; removable
- Removable; 3mm bolt-on
- Life expectancy; 50 years
- Materials: Galvanised steel

INSTALLATION

410 CONTROL SAMPLES

- General: Complete areas of finished work in the following locations...

421 PREPARATION

- Cleanliness: Clean before installation and keep clean during installation.
- Setting out: Before installation of services, indelibly mark pedestal positions if required.
- Fixtures: Before installation, complete fixtures which floor panels are to be cut around or which supports are to bridge.
- Bridging structures - supplementary supports;

425 ENVIRONMENTAL CONDITIONS

- General:
 - Dry, well ventilated, not subject to extremes of temperature or humidity, and free from rapid variations of temperature or humidity
 - RH of air (maximum): 75%
 - RH of surrounding walls (maximum): 75%
- Subfloors:
 - RH (maximum): 75%. Test to BS 8201 using an accurately calibrated hygrometer.
 - Temperature (minimum): 5⁰C

431 DUST PROOFING

- Sealer: Hewseal 30 colour tinted PVA dust sealer. This is compatible with the pedestal adhesive.
- Sealing:
 - Extent.....
 - Preparation: Surfaces to be sealed must be clean, dry and free from dust, grease and other contaminants.

- Number of coats: Two.
- First coat: Apply before pedestals are erected.
- Second coat: Different to first coat. Apply after completion of services and other associated work.

435 CUT FLOOR PANELS

- Size (minimum): 150mm width.
- Burrs and rough edges: Make smooth.
- Edge sealer: Class O spread of flame rated aluminium foil self adhesive tape.
- Edge sealing: Seal all exposed edges of cut floor panels.

441 RAISED ACCESS FLOOR LEVELS

- Permissible deviations in level:
 - Overall set length: +/- 1.5mm over 5m.
 - Overall: +/- 6mm.

445 PERIMETERS

- Expansion gaps:
 - Size: 10mm.
 - Location: At abutments
- Expansion gap filling:
 - Filler type: Resilient closed cell
 - Filling: Before fixing skirtings and cover strips

451 CAVITY BARRIERS

- Construction:
 - Material
 - Fire resistance to BS 476-20: 30 minutes.
- Performance: Permanently stable, continuous, and an effective barrier to smoke and flame.
- Distribution:
 - Centres (maximum): 20 metres.
 - Subdivided areas (maximum); 64m²
- Fixing: Fix securely to subfloor, at joints and as necessary.
- Gaps between cavity barriers and other elements: Seal with mineral wool or other suitable material.
- Fire stopping: give notice when fire stopping is complete.

455 LEVEL CHANGES

- Ramps and steps:
 - Performance: Match performance of associated raised access floor.
 - Proposals: Submit details.
- Balustrade structural and safety requirements: To BS 6180.

465 ELECTRICAL CONTINUITY AND EARTH BONDING

- Substantial metal parts of raised access floor: Electrically continuous and fully earth bonded.
 - Standard: To BS 7671.
 - Bonding methods: Panel and pedestal assembly provide complete electrical continuity.
 - Earthing methods: Pedestals can be fitted with earthing studs for earthing purposes.
- Rooms used for housing electronic data processing equipment:
.....
- Earth bonding connection points: Determine number and location.
- Total resistance of earth fault loop (maximum); Resistance required to operate earth fault protection devices to BS 7671
- Electrical continuity and earth bonding tests:
 - General: Test complete raised access floor.
 - Points for testing: Randomly selected pedestals, stringers, tops and bottoms of floor panels.

COMPLETION

510 TOOLS

- Floor panel lifting devices: At completion, supply one set of suitable devices for each type of raised access floor installed. Train designated personnel in their use.

515 USER INSTRUCTIONS

- Manual contents: Include the following:
 - Correct method for lifting and replacing floor panels and stringers.
 - Servicing: Limitations on sequence, number and positions of floor panels and stringers that can be removed safely at one time.
 - Permissible loads: With guidance on use of spreader plates when shifting heavy equipment and subsequent maintenance.
 - Methods for installing cabling and ducts, to prevent damage to supporting structure.
 - Cleaning methods: For floor panels and integral finishes.
 - Floor panel covering renewal: Method for replacement of integral floor panel coverings.
 - Pedestal adjustment and locking.
 - Maintenance: Recommended methods and frequency. Minimum maintenance-free life of raised access floor system. Minimum maintenance-free life of replaceable parts where this differs

- from that of the whole system. Minimum period during which replaceable components will be available.
- Installation instructions, including COSHH Assessment.

520 SPARES

- General: At completion, supply the following;
 - FDEB38 floor panels.....number.
 - Alpha III pedestals.....number,
 - Bolt-on stringers.....number.

525 CLEANING

- Subfloors: At completion thoroughly clean accessible areas of subfloors and leave free of dust and debris.
- Raised access floor: Before delivery of items carried by floor clean thoroughly.