

K11- RIGID SHEET FLOORING/SHEATHING/DECKING/ LININGS/CASINGS

IRAL-NH[K11]0001

Rev	Summary of Changes	Author	Date	Check	Status
E00	Stage E issue	TMQ	04.04.08	AS	Stage E
F00	Tender Issue	TMQ	31.07.08	AS	Stage F
F01	Revisions as noted. Clauses 500, 536, 537, 538, 815, 816 added.	UY/CR	30.09.08	AS	Stage F
K00	Issued for Construction. Revised clauses 415, 535, 536, 537, 538. Added clauses 320, 330, 340, 539, 540, 817.	OS/CR	19.01.09	AS	Stage K
K01	Added Clauses 316, 320 Deleted 415	TM	02.03.09	AS	Stage K
K02	Revisions as noted. Clauses 315, 316, 320, 321 Added 317	AC	05.03.09	AS	Stage K
K03	Revised Clause: 316 Added Clause: 318, 319 Deleted Clause: 321	AC	17.04.09	AS	Stage K
K04	Added Clause 415, 541 Revised 340, 539, 540	CR	23.06.09	TM	Stage K

K11 RIGID SHEET FLOORING/ SHEATHING/ DECKING/ SARKING/ LININGS/ CASINGS

To be read with A00 Preliminaries/ General conditions.

TYPES OF FLOORING/ SHEATHING/ DECKING/ SARKING/ LINING/ CASINGS

- 315 PLYWOOD FLOORING TO REPLACE EXISTING FLOOR BOARDS
- Location: Levels 1 (except stair landing), 2, and 3.
 - Drawing reference(s): GA Plans
IRAL-5210, IRAL-5211, IRAL-5230, IRAL-5231
IRAL-2200 to IRAL-2213, IRAL-2220 to IRAL-2236
 - Substrate: Existing and new timber joists with softwood furring strips (if required) as clause G20/210.
 - Additional supports: As K11/930.
 - Flooring: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
 - Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, structural characteristics and density.
 - Grade: II/III, Face Grade II, Back and Inner Grades III
 - Nominal thickness/ number of plies: 1 layer 18mm/13 plies, 1 layer 12 mm/9 plies
 - Edges: Tongued and grooved all edges.
 - Weight: 12.2kg/m² (18mm), 8.2kg/m² (12mm)
 - Other requirements: Staggered joints.
Fire retardant pre-treatment to give class 1 surface spread of flame to BS 476-7.
Sanded
WBP
 - Manufacturing Tolerances: Not to exceed 1mm when installed across any panel joint
 - Dimensional tolerances:
 - Panel tolerances: Length/width <1000mm: ± 1mm
1000<Length/width<2000mm: ± 2mm
Length/width >2000mm: ± 3mm
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
 - Setting out: Long edges running across joists. End joints central over joists and staggered.
 - Fixing to joists:
 - Fasteners: 50x8 gauge wood screws into pilot holes in bottom layer.
Fixings are not permitted through the resilient layer.
 - Fixing centres (maximum): To BS 8201.
Around floor perimeter and along short edges of each board: 150 mm.
Along intermediate supports: 300 mm.
 - Fixing distance from edges: 25 mm from long edges and minimum 10 mm from short edges.
 - Resilient Layer: 4.5mm thick acoustic resilient layer between top and bottom plywood layers:
Regupol 4515 Multi or approved equivalent.
Supplier: CMS Acoustics, Unit 4 Eagle Park
Eagle Park Drive, Warrington. WA2 8JA
T: 01925 577711, F: 01925 577733
 - Adhesive fixing: Resilient layer adhered to bottom layer of plywood.
Top layer of plywood adhered to resilient layer.
 - Adhesive: To approval of CA and manufacturer / supplier of resilient layer.
 - Joint treatment: Bonded with PVA adhesive to BS EN 204 class D3

- Expansion provision:
 - Clear expansion gap around perimeter of floor area and upstands:
 - Intermediate expansion/ movement joints: As recommended by flooring manufacturer.

- 316 PLYWOOD FLOORING TO REPLACE EXISTING FLOOR BOARDS AT CARPET
 - Location: Levels Ground, 1 (except stair landing), 2, and 3.
 - Drawing reference(s): GA Plans
IRAL-5210, IRAL-5211, IRAL-5230, IRAL-5231
IRAL-2200 to IRAL-2213, IRAL-2220 to IRAL-2236
 - Substrate: Existing and new timber joists with softwood furring strips (if required) as clause G20/210.
 - Additional supports: As K11/930.
 - Flooring (structural layer): Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
 - Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, structural characteristics and density. - Grade: II/III, Face Grade II, Back and Inner Grades III
 - Nominal thickness/ number of plies: 1 layer 18mm (13 plies)
 - Edges: 18mm: Tongued and grooved all edges.
 - Weight: 12.2kg/m² (18mm),
 - Manufacturing Tolerances: Not to exceed 1mm when installed across any panel joint
 - Dimensional tolerances:
 - Panel tolerances: Length/width <1000mm: ± 1mm
1000<Length/width<2000mm: ± 2mm
Length/width >2000mm: ± 3mm
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
 - Other requirements: Staggered joints.
Fire retardant pre-treatment to give class 1 surface spread of flame to BS 476-7.
Sanded
WBP
Include for removable/lift off panels within floor build-up, Locations to be coordinated with M&E requirements – to CA approval.
 - Setting out: Long edges running across joists. End joints central over joists and staggered.
 - Fixing to joists:
 - Fasteners: 50x8 gauge wood screws into pilot holes in bottom layer.
 - Fixing centres (maximum): To BS 8201.
Around floor perimeter and along short edges of each board: 150 mm.
Along intermediate supports: 300 mm.
 - Fixing distance from edges: 25 mm from long edges and minimum 10 mm from short edges.
 - Flooring (additional layer to level): As Clause K11/318

- 317 PLYWOOD FLOORING TO REPLACE EXISTING FLOOR BOARDS AT STONE
 - Location: Levels Ground
 - Drawing reference(s): GA Plans
IRAL-5210, IRAL-5211, IRAL-5230, IRAL-5231
IRAL-2200 to IRAL-2213, IRAL-2220 to IRAL-2236
 - Substrate: Existing and new timber joists with softwood furring strips (if required) as clause G20/210.

- Additional supports: As K11/930.
- Flooring: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
- Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, structural characteristics and density. - Grade: II/III, Face Grade II, Back and Inner Grades III
- Nominal thickness/ number of plies: 1 layer 18mm (13 plies)
- Edges: 18mm: Tongued and grooved all edges.
- Weight: 12.2kg/m² (18mm),
- Manufacturing Tolerances: Not to exceed 1mm when installed across any panel joint
- Dimensional tolerances:
 - Panel tolerances: Length/width <1000mm: ± 1mm
1000<Length/width<2000mm: ± 2mm
Length/width >2000mm: ± 3mm
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
 - Other requirements: Staggered joints.
Fire retardant pre-treatment to give class 1 surface spread of flame to BS 476-7.
Sanded
WBP
- Setting out: Long edges running across joists. End joints central over joists and staggered.
- Fixing to joists:
 - Fasteners: 50x8 gauge wood screws into pilot holes in bottom layer.
 - Fixing centres (maximum): To BS 8201.
Around floor perimeter and along short edges of each board: 150 mm.
Along intermediate supports: 300 mm.
 - Fixing distance from edges: 25 mm from long edges and minimum 10 mm from short edges.
- Resilient Layer: 4.5mm thick acoustic resilient layer between top and bottom plywood layers:
Regupol 4515 Multi or approved equivalent.
Supplier: CMS Acoustics, Unit 4 Eagle Park
Eagle Park Drive, Warrington. WA2 8JA
T: 01925 577711, F: 01925 577733
- Adhesive fixing: Resilient layer adhered to bottom layer of plywood.
Top layer of plywood adhered to resilient layer.
- Adhesive: To approval of CA and manufacturer / supplier of resilient layer.
- Joint treatment: Bonded with PVA adhesive to BS EN 204 class D3
- Expansion provision:
 - Clear expansion gap around perimeter of floor area and upstands:
 - Intermediate expansion/ movement joints: As recommended by flooring manufacturer.
- Finished Flooring Build-up: Refer to M40/120; self-levelling screed as M10/180 to flat flooring areas.

318 ADDITIONAL LAYER OF PLYWOOD TO LEVEL AT CARPET

- Location: Ground, First, Second and Third Floors
Refer to IRAL-5210 & IRAL-5211 for floor finishes locations
Refer to IRAL-15/2210 and IRAL-02/2210 for floor build-up details
- Base: Refer to IRAL-15/2210 and IRAL-02/2210
Plywood sub-floor as K11/315 or Leveling screed as M50/183

- Additional Layer: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
- Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, and density.
- Grade: II/III, Face Grade II, Back and Inner Grades III
- Nominal thickness/ number of plies: 1 layer 4mm (3 plies) or 1 layer of 6.5mm (5plies) or 9mm (7plies) as required achieving finished floor level.
- Edges: square edges
- Weight: 2.7kg/m² (4mm), 4.4 kg/m² (6.5mm), 6.1kg/m² (9mm),
- Dimensional tolerances:
 - Thickness tolerances: (4mm): Between 3.5mm min and 4.1mm max.
(6.5mm): Between 6.1mm min and 6.9mm max.
(9mm): Between 8.8mm min and 9.5mm max.
 - Panel tolerances: Length/width <1000mm: ± 1mm
1000<Length/width<2000mm: ± 2mm
Length/width >2000mm: ± 3mm
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
- Fixing:
 - to ply sub-floor (K11/317) Screw fixed onto 18mm ply sub-floor with c/s wood screws. Include for removable/lift off panels within floor build-up (to include structural flooring layer) Locations to be coordinated with M&E requirements – to CA approval.
 - to existing concrete tbd
- Other requirements: Fire retardant pre-treatment to give class 1 surface spread of flame to BS 476-7.
Sanded
WBP
- Setting out: tbd
- Joint treatment: Bonded with PVA adhesive to BS EN 204 class D3
- Expansion provision:
 - Clear expansion gap around perimeter of floor area and upstands:
 - Intermediate expansion/ movement joints: As recommended by flooring manufacturer.
- Interfaces: Plywood subfloor as K11/315
Leveling screed as M10/183
Carpet underlay as M50/171

319 PLYWOOD FLOORING AT PROPRIETARY UNDERFLOOR HEATING SYSTEM

- Location: Basement: Room B15/B16
- Drawing reference(s): IRAL-0410
IRAL-5210, IRAL-5211, IRAL-5230, IRAL-5231
IRAL-2200 to IRAL-2213, IRAL-2220 to IRAL-2236
- Substrate: Proprietary underfloor heating floating floor system, including floating floor panels, UFH pipework and metal diffusion plates per mechanical.
- Additional supports: As K11/925 as required for underfloor heating system.
- Flooring: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
- Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, structural characteristics and density.
- Grade: II/III, Face Grade II, Back and Inner Grades III
- Nominal thickness/ number of plies: 1 layer 18mm/13 plies
- Edges: Tongued and grooved all edges.
- Weight: 12.2kg/m² (18mm)
- Other requirements: Staggered joints.
Sanded
WBP

- Manufacturing Tolerances: Not to exceed 1mm when installed across any panel joint
 - Dimensional tolerances:
 - Panel tolerances: Length/width <1000mm: $\pm 1\text{mm}$
 1000<Length/width<2000mm: $\pm 2\text{mm}$
 Length/width >2000mm: $\pm 3\text{mm}$
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
 - Setting out: Long edges running across joists. End joints central over joists and staggered.
 - Fixing of 18mm flooring: As per underfloor heating system manufacturers recommendation.
 - Additional Layer Flooring: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
 - Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, and density.
 - Grade: II/III, Face Grade II, Back and Inner Grades III
 - Nominal thickness/ number of plies: 1 layer of 6.5mm (5plies)
 - Edges: square edges
 - Weight: 4.4 kg/m² (6.5mm)
 - Dimensional tolerances:
 - Thickness tolerances: (6.5mm): Between 6.1mm min and 6.9mm max.
 - Panel tolerances: Length/width <1000mm: $\pm 1\text{mm}$
 1000<Length/width<2000mm: $\pm 2\text{mm}$
 Length/width >2000mm: $\pm 3\text{mm}$
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
 - Fixing of additional layer to 18mm flooring: Screw fixed onto 18mm ply sub-floor with c/s wood screws.
 - Joint treatment: Bonded with PVA adhesive to BS EN 204 class D3
 - Expansion provision:
 - Clear expansion gap around perimeter of floor area and upstands:
 - Intermediate expansion/ movement joints: As recommended by flooring manufacturer.
- 320 PLYWOOD SUBSTRATE TO STAIR 8**
- Location: STAIR 8
 - Drawing reference(s): GA Plans
 IRAL-5210, IRAL-5211, IRAL-5230, IRAL-5231
 IRAL-2200 to IRAL-2213, IRAL-2220 to IRAL-2236
 - Substrate: Folded steel deck
 - Flooring: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
 - Type: Birch Plywood or approved equivalent to the same or better appearance grades, dimensional tolerances, structural characteristics and density.
 - Grade: II/III, Face Grade II, Back and Inner Grades III
 - Nominal thickness/ number of plies: 9mm (7plies), 1 layer.
 - Edges: Flush
 - Resilient Layer: 4.5mm thick acoustic resilient layer between top and bottom plywood layers:
 Regupol 4515 Multi or approved equivalent.
 Supplier: CMS Acoustics, Unit 4 Eagle Park
 Eagle Park Drive, Warrington. WA2 8JA
 T: 01925 577711, F: 01925 577733
 - Weight: 6.1 kg/m² (9mm)
 - Manufacturing Tolerances: Not to exceed 1mm when installed across any panel joint
 - Dimensional tolerances:
 - Panel tolerances: Length/width <1000mm: $\pm 1\text{mm}$
 1000<Length/width<2000mm: $\pm 2\text{mm}$

- Length/width >2000mm: ± 3mm
 - Squareness of panels: 1 mm/m
 - Squareness of edges: 1 mm/m
 - Other requirements: Fire retardant pre-treatment to give class 1 surface spread of flame to BS 476-7.
Sanded
WBP
 - Setting out: Long edges running across joists. End joints central over joists and staggered.
 - Fixing to joists:
 - Fasteners: 50x8 gauge wood screws into pilot holes in bottom layer. Fixings are not permitted through the resilient layer.
 - Fixing centres (maximum): To BS 8201.
Around floor perimeter and along short edges of each board: 150 mm.
Along intermediate supports: 300 mm.
 - Fixing distance from edges: 25 mm from long edges and minimum 10 mm from short edges.
 - Adhesive fixing: Resilient layer adhered to bottom layer of plywood.
Top layer of plywood adhered to resilient layer.
 - Adhesive: To approval of CA and manufacturer / supplier of resilient layer.
 - Joint treatment: Bonded with PVA adhesive to BS EN 204 class D3
 - Expansion provision:
 - Clear expansion gap around perimeter of floor area and upstands:
 - Intermediate expansion/ movement joints: As recommended by flooring manufacturer.
 - Fixing:
 - Fasteners: As appropriate for substrate
 - Adhesive: tbc
 - Fixing centres (maximum): To BS 8201
 - Fixing distance from edges: 15mm
- 330 PLYWOOD LINING TO VENTILATION BOX AT ROOM B12
- Location: Above door D-B11-1 between rooms B11 and B12.
 - Drawing reference(s): IRAL- 1025, 2020
 - Supporting structure: Welded steel frame H12/030.
 - Sheathing: Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
 - Type: Marine Plywood WBP K11/817
 - Grade: Face Grade B, Back Grade C
 - Nominal thickness/ number of plies: 12mm
 - Other requirements: Fire Retardant
 - Joints: All joints to be sealed Z22/xxx to prevent passage of air before painting.
 - Finish: M60/142
- 340 PLYWOOD LINING TO WINDOW BOXES/**PLENUM BOXES**
- Generally as K11/330 except:
 - Location: Window boxes, **plenum boxes-**
 - Drawing reference(s): IRAL- 2340 through 2349, **2244, 2246, 2247-**
 - Supporting structure: Timber battens G20/240, **additional support as per drawings-**
- 415 PERFORATED MECHANICAL ACCESS PANEL**
- **Drawings ref(s):**
 - **Location:** Refer to IRAL-2357, IRAL-2244, IRAL-5240, IRAL-5241
 - **Description:** 18mm MDF board
40 % slot perforation

- **Dimensions:** Slotsize 10 mm, Intermediates 15 mm, Top and bottom frame 40 mm
 - **In general:** According to drawings.
 - **Material:** to cover airtight plenum boxes for mechanical extract Medite Ecologique, MDF with zero added formaldehyde.
 - **Distributor:** Medite Europe
Persimmon House
Anchor Boulevard
Crossways Business Park
Kent DA2 6QH
Tel: + 44 (0) 1322 424900
Fax: + 44 (0) 1322 424920
 - **Framing:** Stainless steel frame 25 x 40 x 2 mm with threaded holes to take grille fixings. Stainless steel frame to allow for welded extensions at deflection detail.
 - **Fixings to support:** invisible
 - **Other requirements:** Acoustic insulation for services to be included, if required.
 - **Size:** Refer to mechanical grill schedule IRAL-[K10]1002
 - **Finish:** refer to M60/140
 - **Interfaces:** Plasterboard walls K10.
Ceilings K10
Mechanical and electrical services: Refer to MEP specification & drawings
- 500 WATERPROOF BACKER BOARD
- **Location:** Tiled showers M40/110 in B04, B07, B16, G11
Stone benches M40/125 in B12
 - **Drawing reference:** IRAL-2600, 2605, 2623
IRAL-1020, 1023, 1024, 1025, 1026, 2011, 2012, 2022, 2040, 2041
 - **Product reference:** WEDI Tilebacker board Ref No: BA20
 - **Distributor:** Go Interiors (London) Ltd
Unit 3
Elizabeth Industrial Estate
Juno Way
Lewisham, London, SE14 5RW
T: 08709 100011, F: 09709 100022
- 535 MECHANICAL ACCESS GRILLE FLOOR
- **Drawings ref(s):** IRAL-2240, IRAL-2241
Mechanical grill schedule IRAL-[K10]1002
 - **Location:** Refer to IRAL-5240 and IRAL-5241
 - **Description:** Stainless steel wedgewire grille for low level floor supply grilles. Grille assembly includes a stainless frame with fixing points and neoprene cushion between grill and frame. Frame assembly to trench heater system – allow for continuous joist cover pieces to match trench heater finish.
 - **Manufacturer:** Potter and Soar Ltd
Beaumont Road
Banbury, Oxon,
OX16 1SD
Tel: 01295 253344
www.architecturalmesh.co.uk
 - **Product reference:** Seine pattern in 304-304L stainless steel. 4.3mm slot openings with a 65% open area. Filtration profile:90. 10x2mm support rods at 50mm centres.

- Framing: Welded tabs at maximum 200mm c/c to take bolt fixings to frame assembly.
Stainless steel frame 19x19x3mm incorporating mechanical fixing for wedgewire grill.
Allow galvanised unequal steel angles as required for trenchheater fixing to timber joists. Sizes to be confirmed by Structural engineer.
 - Size: Refer to mechanical grill schedule IRAL-[K10]1002
 - Finish: Natural finish. Pickled – passivated
 - Interfaces: Ceilings K10
Flooring K21, M40, M50
Plasterboard walls K10.
Skirtings P20.
Mechanical and electrical services: Refer to MEP specification & drawings
New and existing steel and timber structure refer to SE specification and drawings.
- 536 MECHANICAL LOUVRE GRILLE (EXTERNAL – FIXED)
- Drawings ref(s): IRAL-1025, IRAL-2020
Mechanical grill schedule IRAL-[K10]1002
 - Location: Refer to IRAL-5240 and IRAL-5241
 - Description: Louvre ventilation system for external use.
Fixed external weather louvres.
Visible external grille to be wedgewire as clause K10/410 mounted in front of louvre system.
ABS thermal break
4mm black polypropylene insect screen
 - Manufacturer: Passivent Limited
2 Brooklands Road
Cheshire
M33 3SS
Tel: 0161 962 7113
www.passivent.com
 - Product reference: Passivent Aircool Ventilator Standard.
 - Framing: extruded aluminium framing
 - Size: Refer to mechanical grill schedule IRAL-[K10]1002
 - Finish: Stainless steel.
 - Interfaces: Ceilings K10
Flooring K21, M40, M50
Plasterboard walls K10.
Mechanical and electrical services: Refer to MEP specification & drawings
New and existing steel and timber structure refer to SE specification and drawings.
Stainless steel insulated gutter H13/192.
- 537 MECHANICAL LOUVRE GRILLE (INTERNAL – CONTROLLABLE)
- Drawings ref(s): IRAL-1025, IRAL-2020
Mechanical grill schedule IRAL-[K10]1002
 - Location: Refer to IRAL-5240 and IRAL-5241
 - Description: Louvre ventilation system.
Insulated PVC-U controllable internal louvres.
Visible internal grille to be wedgewire as clause K10/410 mounted in front of louvre system.
ABS thermal break
4mm black polypropylene insect screen
 - Manufacturer: Passivent Limited

- Product reference: Passivent Aircool Ventilator Standard.
 - Framing: extruded aluminium framing
 - Size: Refer to mechanical grill schedule IRAL-[K10]1002
 - Finish: Stainless steel.
 - Interfaces: Ceilings K10
Flooring K21, M40, M50
Plasterboard walls K10.
Mechanical and electrical services: Refer to MEP specification & drawings
New and existing steel and timber structure refer to SE specification and drawings.
Door D-B11-1 and frame.

- 538 MECHANICAL ACCESS GRILLE WALL
 - Drawings ref(s): IRAL-1023, IRAL-1024, IRAL-1026, IRAL-2011, IRAL-2010, IRAL-2040, IRAL-2041
Mechanical grill schedule IRAL-[K10]1002
IRAL-2356
Window box Interface drawings IRAL-2360 to IRAL-2378
 - Location: Refer to IRAL-5240 and IRAL-5241
 - Description: Stainless steel wedgewire grille for low level wall supply grilles. Grille assembly includes a stainless frame with fixing points, opening mechanism with piano hinge and magnetic catch.
 - Manufacturer: Potter and Soar Ltd
Beaumont Road
Banbury, Oxon,
OX16 1SD
Tel: 01295 253344
www.architecturalmesh.co.uk
 - Product reference: Seine pattern in 304-304L stainless steel. 4.3mm slot openings with a 65% open area. Filtration profile:90. 10x2mm support rods at 50mm centres.
 - Framing: Stainless steel frame 40x20x4mm incorporating fixing to Window Box.
 - Hinge: Stainless steel Piano hinge 25 x 2 mm welded to stainless steel frame and wedgewire grille
 - Magnetic catch: Sugatsune or equivalent, stainless steel, product reference TBC and subject to testing.
 - Size: Refer to mechanical grill schedule IRAL-[K10]1002 and detail drawing IRAL-2356
 - Finish: Natural finish. Pickled – passivated
 - Interfaces: Ceilings K10
Flooring K21, M40, M50
Plasterboard walls K10.
Skirtings P20.
Mechanical and electrical services: Refer to MEP specification & drawings
New and existing steel and timber structure refer to SE specification and drawings.

539 WINDOW BOX DIFFUSER PLATE

- Drawings ref(s): IRAL-2340 to IRAL-2349
 - Location: Window Box
 - Description: Removable diffuser plate, painted metal, 50 % open area,
 - Manufacturer: TBC, refer to standard Off-The-Shelf products
 - Fixings: Diffuser plate support as required fixed to Window Box
 - Size: Cut to size as indicated on drawing reference
 - Framing: 25 x 25 x 3mm steel angles, airtight fixing within window box
 - Finish: ~~Dark Grey Finish M60/131.~~ **Colour 005 as M60/100 (or to RAL 7016 to CA approval). Heat resistant to suit use.**
 - Interfaces: Window Box Lining K11/340.
- 540 WINDOW BOX BLANKING PLATE**
- Drawings ref(s): IRAL-2340 to IRAL-2349
 - Location: Window Box
 - Description: 2mm and 4mm plate steel, welded
 - Manufacturer: TBC
 - Fixings: M4 countersunk screwfixing to Window Box as required
~~Dark Grey Finish M60/131.~~
 - Size: as indicated on drawing reference
 - Finish: ~~Dark Grey Finish M60/131.~~ **Colour 005 as M60/100 (or to RAL 7016 to CA approval). Heat resistant to suit use.**
 - Interfaces: Window Box Lining K11/340.
- 541 EXTRACT PLENUM EQUALISING GRID**
- **Drawings ref(s):** IRAL-2244 to 2249
 - **Location:** Extract plenum boxes and shadow gaps
 - **Description:** Open metal grid – Open requirement to be confirmed
 - **Manufacturer:** TBC
 - **Fixings:**
 - **Size:** As indicated on drawing reference,
To fit in plenum/shadow gap.
 - **Finish:** Colour 005 as M60/100 (or to RAL 7016 to CA approval).
 - **Interfaces:** Plywood plenum boxes as K11/330; plasterboard shadowgaps as indicated on drawings.
- 815 PLYWOOD TO TOP OF BLIND PELMET**
- Description: Visible plywood lining to top of blind pelmet
 - Drawings ref(s):
 - Location: Refer to IRAL-2320 to and IRAL-2324 and window schedule IRA-NH[L10]1001
 - Material: 18mm birch plywood
Plywood manufactured to the relevant standards and quality control procedures specified in BS 5268-2, and so marked.
Manufacturer:
James Latham
Milner Way
Longlands
Ossett
WF5 9JE
Tel: 01924 263655
Fax: 01924 280193
Web: www.lathamtimber.co.uk
 - Appearance Class: BS EN 635-3, Class I
 - Finishes: Painted to M60/150 and colour 001 to M60/100
 - Setting Out: As per location drawings,

- Supports Lengthways along blind pelmet.
as clause NBS G20/240
- Fixings: M4.0x50 Countersunk Pozi Woodscrew
Stainless Steel A2 (304)
Distributor:
Orbital Fasteners Ltd.
Olds Approach
Tolpits Lane
Watford
WD18 9XT
Tel: 01923 777777
Fax: 01923 779169
www: www.orbitalfasteners.co.uk
Fixing distance from edges: 15mm
Along intermediate supports: Setting out as location
drawings.
Use pilot holes prepared for countersunk fixings.

816 PLYWOOD BATTENING/BLOCKING

- Drawings ref(s):
- Location: Refer to IRAL-5240 and IRAL-5241
- Description: 6mm, 12mm, 18mm plywood as noted/required.
- Material: Plywood manufactured to the relevant standards and
quality control procedures specified in BS 5268-2, and
so marked.
- Substrate: Existing and new timber battens, existing or new masonry
construction, new plasterboard construction. Softwood
furring strips (if required) as clause G20/210.
 - Type: Birch Plywood
 - Grade: C
 - Nominal thickness/ number of plies: 1 layer 18mm, 1 layer 12 mm, 1 layer 6mm
 - Other requirements: Fire retardant
- Fixing:
 - Fasteners: As appropriate for substrate
 - Adhesive: tbc
 - Fixing centres (maximum): To BS 8201
 - Fixing distance from edges: 15mm

817 MARINE PLYWOOD

- Drawings ref(s):
- Location: Refer to IRAL-2340 to IRAL-2349
- Description: 6MM, 12mm plywood as noted/required.
- Material: Plywood manufactured to the relevant standards and
quality control procedures specified in BS 5268-2 and
BS1088 and so marked.
- Substrate: Existing and new timber battens fixed to existing or new
masonry construction. Softwood furring strips (if required) as
clause G20/210.
 - Type: Marine Plywood
 - Grade: B
 - Nominal thickness/ number of plies: 1 layer 6mm, 1 layer 12 mm
 - Other requirements: Fire retardant
- Fixing:
 - Fasteners: As appropriate for substrate
 - Adhesive: tbc
 - Fixing centres (maximum): To BS 8201
 - Fixing distance from edges: 15mm

886 FIRE PROTECTION BOARD CASING TO STEEL BEAMS

- Substrate: Non-combustible mineral bound calcium silicate
- Board: 12mm and 15mm Promat Promatect-250
 - Manufacturer/ Supplier: Promat UK Limited
The Sterling Centre
Eastern Road, Bracknell
Berkshire RG12 2TD
Tel.: 01344 381 300
 - Product reference: Promatect-250
 - Colour/ Pattern/ Finish: smooth, unsanded
 - Fire rating: 60 min
 - Thickness: 15mm
 - Edges: square
 - Other requirements: -
- Setting out: 120 mm wide Promatect-250 soldiers positioned behind the side boards and at maximum 1250 mm centres or behind any board joint. No cover strips required behind board joint covering flanges.
Stagger joints on adjacent sides by at least 530 mm. Secure boards to each other at corners and to soldiers, using staples.
- Gap between adjacent boards: 0.0 mm
- Fixing to supports:
 - Fasteners: Chisel point staples 50 mm x 12.5 mm x 1.6 mm
 - Fixing centres (maximum): 150 mm
 - Around board edges: 40 mm
 - Along intermediate supports:
 - Fixing distance from edges (minimum): 6 mm
- Joint treatment: no joint treatment required
- Accessories: -

WORKMANSHIP

910 INSTALLATION GENERALLY

- Timing: Building to be weathertight before fixing boards internally.
- Moisture content of timber supports (maximum): 18%.
- Joints between boards: Accurately aligned, of constant width and parallel to perimeter edges.
- Methods of fixing, and fasteners: As section Z20 where not specified otherwise.

915 DRYNESS OF CONCRETE/ SCREED SUBSTRATES FOR FLOATING FLOORS

- Relative humidity above substrate when tested with a hygrometer to BS 8201, Appendix A (maximum): 75%.
 - Test points: All corners, around perimeter, and random points over area being tested.
 - Drying aids: Turned off for not less than 4 days before testing.

920 VAPOUR CONTROL LAYER IN FLOATING FLOOR CONSTRUCTION

- Location: Immediately below floating layer.
- Installation:
 - Joints: Overlapped by minimum 150 mm and sealed with vapour resistant tape.
 - Treatment of membrane at perimeter of flooring and upstands: Turned up and sealed to top face of flooring using a method approved by the board manufacturer.
- Excess material: Trimmed off neatly after fixing skirtings/ cover beads.
- Condition of membrane before laying flooring: Clean and dry.

925 BATTENS FOR FLOATING FLOORS

- Timber quality: Free from decay, insect attack (except ambrosia beetle damage) and with no knots wider than half the width of the section.
 - Preservative treatment: As section Z12 and Wood Protection Association Commodity Specification C8.
 - Type/ Desired service life: tbc
 - Moisture content at time of laying (maximum): 16%.
- 930 **ADDITIONAL SUPPORTS**
- Additional studs, noggings/ dwangs (Scot) and battens:
 - Provision: In accordance with board manufacturer's recommendations and as follows:
 Tongue and groove jointed rigid board areas: To all unsupported perimeter edges.
 Butt jointed rigid board areas: To all unsupported edges.
 - Size: Not less than 50 mm wide and of adequate thickness.
 - Quality of timber: As for adjacent timber supports.
 - Treatment (where required): As for adjacent timber supports.
- 940 **BOARD MOISTURE CONTENT AND CONDITIONING**
- Moisture content of boards at time of fixing: Appropriate to end use.
 - Conditioning regime: Submit proposals.
- 950 **MOISTURE CONTENT TESTING**
- Test regime and equipment: Submit proposals.
 - Test results: Submit record of tests and results.
- 960 **FIXING GENERALLY**
- Boards/ Sheets: Fixed securely to each support without distortion and true to line and level.
 - Fasteners: Evenly spaced in straight lines and, unless otherwise recommended by board manufacturer, in pairs across joints.
 - Distance from edge of board/ sheet: Sufficient to prevent damage.
 - Surplus adhesive: Removed as the work proceeds.
- 975 **METAL WALL FRAMING**
- Setting out: Framing accurately aligned, vertical and securely fixed to surrounding structure at maximum 600 mm centres. All board edges supported.
- 976 **MINERAL WOOL INSULATION TO METAL FRAMING**
- Installation: Neat and secure with close butted joints and no gaps. Where insulation is not self supporting, fixed at head of frame using clips or other suitable proprietary fixings.
- 980 **OPEN JOINTS**
- Perimeter joints, expansion joints and joints between boards: Free from plaster, mortar droppings and other debris.
 - Temporary wedges and packings: Removed on completion of board fixing.
- 990 **ACCESS PANELS**
- Size and position: Agree before boards are fixed.
 - Additional noggings/ dwangs (Scot), battens, etc: Provide and fix as necessary.

End of K11