

P31 HOLES/CHASES/COVERS/SUPPORTS FOR SERVICES

To be read with Preliminaries/General conditions.

- 110 COORDINATION:
- Locations and dimensions of holes and chases for services: Submit details drawings.
- 150 HOLES AND CHASES IN IN-SITU CONCRETE:
- Cast in: Holes larger than 10 mm diameter and chases.
 - Cutting and drilling:
 - Permitted for holes not larger than 10 mm diameter.
 - Not permitted for holes larger than 10 mm diameter except as indicated on drawings.
- 160 HOLES AND CHASES IN PRECAST CONCRETE:
- Cutting and drilling: Not permitted except as indicated on drawings.
- 170 HOLES IN STRUCTURAL STEELWORK:
- Cutting and drilling: Not permitted except as indicated on drawings.
- 185 HOLES, RECESSES AND CHASES IN MASONRY:
- Locations: To maintain integrity of strength, stability and sound resistance of construction.
 - Sizes: Minimum needed to accommodate services.
 - Holes (maximum): 300 x 300 mm.
 - Walls of hollow or cellular blocks: Do not chase.
 - Walls of other materials:
 - Vertical chases: No deeper than one third of single leaf thickness, excluding finishes.
 - Horizontal or raking chases: No longer than 1 m. No deeper than one sixth of the single leaf thickness, excluding finishes.
 - Chases and recesses: Do not set back to back. Offset by a clear distance at least equal to the wall thickness.
 - Cutting: Do not cut until mortar is fully set. Cut carefully and neatly. Avoid spalling, cracking and other damage to surrounding structure.
- 230 NOTCHES AND HOLES IN STRUCTURAL TIMBER:
- General: Avoid if possible.
 - Sizes: Minimum needed to accommodate services.
 - Position: Do not locate near knots or other defects.
 - Notches and holes in same joist: Minimum 100 mm apart horizontally.
 - Notches in joists: Locate at top. Form by sawing down to a drilled hole.
 - Depth (maximum): 0.125 x joist depth.
 - Distance from supports: Between 0.07 and 0.25 x span.
 - Holes in joists: Locate on neutral axis.
 - Diameter (maximum): 0.25 x joist depth.
 - Centres (minimum): 3 x diameter of largest hole.
 - Distance from supports: Between 0.25 and 0.4 of span.
 - Notches in roof rafters, struts and columns: Not permitted.
 - Holes in struts and columns: Locate on neutral axis.
 - Diameter (maximum): 0.25 x minimum width of member.
 - Centres (minimum): 3 x diameter of largest hole.
 - Distance from ends: Between 0.25 and 0.4 of span.
- 310 PIPE SLEEVES FOR ALL SERVICE PENETRATIONS THROUGH WALLS:
- Material: PVCU
 - Sleeves: Extend through full thickness of wall or floor. Position accurately.
 - Clearance around service (maximum): 20 mm or diameter of service, whichever is the lesser.
 - Installation: Bed solid.

- Space between service and sleeve: Seal with decorator's mastic; if firewall, use **intumescent mastic**
 - Where exposed to view: Finish bedding and sealing neatly.
- 320 INTUMESCENT COLLARS FOR SVPS THROUGH CONCRETE FLOORS:
- Manufacturer: Marley or similar.
 - Pipeline nominal sizes: 110 mm and 50mm.
 - Fixing: Mechanically fix to concrete and concrete infill surround.
 - Fixings must not incorporate plastics materials.
 - Fire resistance: 1 hour.
 - Integrity: Fit tightly and accurately to structure and pipe to maintain fire resistance. Fill gaps between collar and structure and/or pipe with intumescent material.
- 330 INTUMESCENT FIRE STOP PILLOWS:
- Manufacturer: ENVIROGRAF or similar.
 - Product reference: Fire Stop Pillows.
 - Pipeline nominal sizes: Varies.
 - Fixing: To manufacturers recommendations.
 - Fixings must not incorporate plastics materials.
 - Fire resistance: 4 hours.
 - Not to be used adjacent to PVC pipes.
 - Integrity: Fit tightly and accurately to structure and pipe to maintain fire resistance. Fill gaps between collar and structure and/or pipe with intumescent material.
- 340 SEALING AROUND SERVICES:
- Service: Hot and cold water services.
 - Location: Fire resisting construction and partitions in ceiling voids.
 - Sealing material: Sealmaster Intumescent mastic.
 - To be used only where void is too small for alternative method.
 - Requirement: Achieve necessary fire separation to element.