

HF Mech 416

QUICK FIX SOIL SYSTEM



The **Mech 416** system from Hargreaves Drainage is a mechanically jointed socketless cast iron system for above ground soil drainage. It is finished in a matt black two part epoxy coating.

These products are manufactured to BS416 part 2 standard to meet the needs of specifiers and contractors.

The Mech 416 system is especially suitable for the refurbishment of apartment blocks and multi-storey car parks.

Mechanically jointed systems provide all the benefits of a conventional BS416 socket and spigot cast iron soil system but also offer significant labour savings due to the efficient jointing techniques employed.

The installation is mechanically jointed using simple and reliable couplings. It can be fitted both horizontally and vertically.

Benefits

- Significant labour saving compared to caulked jointed systems
- Strength / durability- highly resistant to distortion
- Quiet in operation- sound deadening properties reduce acoustic insulation costs
- Lighter and easier to handle than traditional LCC cast iron soil systems
- Robust ductile iron couplings do not need specialist tools to install

Typical Applications

- Refurbishment projects
- Public buildings, hospitals and schools
- Apartment and hotel developments
- Offices and commercial units
- Retail buildings and car parks

Materials

Pipes and fittings are manufactured in grey cast iron which exceeds the requirements of BS EN 1561 Grade EN-JL 1020, ISO 185 Grade 15.

Mech 416 ductile cast iron couplings are manufactured in accordance with BS EN 1563, ISO 1083 with minimum tensile strength of 420N/mm²

All couplings are supplied with EPDM rubber sealing rings which are suitable for most applications but where aggressive waste liquids are to be discharged please check with our technical department as to their suitability.

Sustainability

- Correctly installed and maintained Mech 416 systems can last in excess of 100 years
- Cost effective over whole of life
- Cast iron is 100% recyclable at the end of its life

Standards

Manufactured to:

- BS 416 part 2 - Soil, waste and ventilating pipes and fittings.
- BS 6087- Flexible joints for BS 416 part 2.

Codes of Practice

BS EN 12056

Codes of practice for gravity drainage systems, internal buildings- sanitary pipework and drainage of roofs.

Coating Specification

Pipes

External: Two part epoxy coating (black) with an average dry wall thickness of 70 microns.

Internal: Two part epoxy coating (yellow ochre) with an average dry wall thickness of 130 microns.

Fittings

External: Two part epoxy coating (black) with an average dry wall thickness of 70 microns.

Internal: Two part epoxy coating (black) with an average dry wall thickness of 70 microns.

Additional top coating is required for exterior use



Product Options

| | | | |
|-------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------|----------------------------------|
| Pipes | Size (nominal) | Bends | Size (nominal) |
| 3m Double spigot soil pipes | 50, 70, 100, 150mm | 87.5 degree short radius bends | 50, 70, 100, 150mm |
| | | 67.5 degree short radius bends | 100mm |
| Couplings | Size (nominal) | 45 degree short radius bends | 50, 70, 100, 150mm |
| Ductile iron couplings | 50, 70, 100, 150mm | 30 degree short radius bends | 100mm |
| Ductile iron couplings with continuity | 50, 70, 100, 150mm | 15 degree short radius bends | 100mm |
| Conversion coupling– Mech 416 to traditional LCC soil | 70/65mm, 100/100mm | 87.5 degree long radius bends | 100, 150mm |
| Conversion coupling– Mech 416 to alternatively sized equivalent systems | 70/75mm | 22.5 degree long radius bends | 100mm |
| | | 87.5 degree short radius bends with door | 70, 100mm |
| | | 87.5 degree long radius bend with door | 100, 150mm |
| | | 87.5 degree long tail bend | 100mm |
| Fittings | Size (nominal) | Branches | Size (nominal) |
| Access pipes with round door | 50, 70, 100, 150mm | 87.5 degree single equal branches | 50x50, 70x70mm |
| Access pipes with rectangular door | 100, 150mm | 87.5 degree single unequal branches | 70x50, 100x50, 100x70mm |
| Offsets 75mm projection | 100mm | 67.5 degree single equal branches | 100x100mm |
| Offsets 130mm projection | 50, 70, 100mm | 45 degree single equal branches | 50x50, 70x70, 100x100, 150x150mm |
| Boss pipes single boss | 70, 100, 150mm | 45 degree single unequal branches | 70x50, 100x50, 100x70, 150x100mm |
| Boss pipe double opposed | 100mm | 87.5 degree single radius curve branches | 100x100, 150x100, 150x150mm |
| Boss pipe double at 90 degrees | 100mm | 87.5 degree single radius curve branches with door | 100x100, 150x100, 150x150mm |
| Strap on boss | 100mm | 45 degree double branches | 100x100, 150x100mm |
| Pipe tapers | 70x50, 100x50, 100x70, 150x100mm | 87.5 degree double radius curve branches | 100x100, 150x100mm |
| P traps with bottom door | 50, 70, 100, 150mm | 87.5 degree single radius curve branches with boss on back | 100x100mm |
| Blank ends | 50, 70, 100, 150mm | 87.5 degree single radius curve branches with boss on left | 100x100mm |
| Blank ends drilled and tapped | 100, 150mm | 87.5 degree single radius curve branches with boss on right | 100x100mm |
| Bellmouth gully inlet | 100mm | | |
| Solid cover | 200mm | Tools | |
| Plain grating | 200mm | Ratchet spanner | |
| Bolt on puddle flange | 100mm | Socket for access door bolts | |
| | | Allen socket adapter for couplings | |
| Brackets | Size (nominal) | | |
| Coated adjustable brackets | 50, 70, 100, 150mm | | |
| Zinc plated rubber lined bismat brackets | 50, 70, 100, 150mm | | |
| Zinc plated heavy duty bossed brackets | 50, 70, 100, 150mm | | |
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| Galvanised pipe clamps | 50, 70, 100, 150mm | | |
| Zinc plated split band clips | 50, 70, 100, 150mm | | |