CI/SfB | | | TN6 | L6813

June 2020

RIW SHEETSEAL 226

Sheetseal 226 is a cold applied, high density polyethylene film, coated with a bitumen/rubber self adhesive layer with a removable reinforced silicone paper.
Sheetseal Primer is a bitumen solution.

BENEFITS

- Water and water vapour barrier
- Factory controlled thickness
- Elastic and flexible
- Damage easily repaired
- No drying time
- Sulphate resistant
- Selvedge strip to improve lap sealing

APPLICATIONS

- Basements and sub-structures
- Ground floors
- Reservoirs
- Retaining walls

APPLIED TO

- Concrete
- Masonry
- Steel
- Insulation boards / ICF systems

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RIW SHEETSEAL 226

TYPICAL USES

Sheetseal 226 is typically used to provide a water and water vapour barrier in all forms of construction, particularly where large unobstructed areas are to be treated. Typical installations include floors, retaining walls and similar uncluttered surfaces. When designing Type A (barrier) protection, as classified in BS 8102: 2009, the product applied correctly, is capable of providing the levels of protection required for Grades 1, 2 & 3 basements. Sheetseal Primer is used on all vertical or inclined surfaces to aid adhesion of the Sheetseal 226.

DURABILITY

Subject to normal conditions of use Sheetseal 226 will provide an effective barrier to the transmission of liquid water and water vapour for the life of the structure. The membrane is not designed for permanent exposure and must always be protected by a screed, paving slabs, insulation etc.

SPECIFICATION

J40 - Flexible Sheet Tanking/Damp Proofing, in accordance with NBS Clause 190.

Please consult RIW for further information.

INDEPENDENT AUTHORITY

Sheetseal 226 has been awarded British Board of Agrément Certificate No. 92/2817 covering use for waterproofing above, at or below ground level.

CE

RIW Limited
580-581 Ipswich Road,
Slough, Berks, SL1 4EQ, GB
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0836-CPR-13/FO41

EN 13967: High performance self-adhesive waterproof membrane

Reaction to fire:	Class F
Watertightness:	Pass
Durability	
- Watertightness after artificial ageing	Pass
- Watertightness after exposure to chemicals	Pass
Dangerous Substances:	NPD
Durability against alkali:	Pass

PERFORMANCE & COMPOSITION

SHEETSEAL 226

Form	Self adhesive sheet
Backing material	Cross orientated polyethylene
Overall thickness	1.60mm
Applied thickness	1.50mm
Roll sizes	1050mm x 19.05m long 300mm x 20m long 150mm x 20m long
Weight	1.7kg/m^2
End laps	100mm
Side laps	50mm
Membrane strength	(ASTM D1000) 5.0 N/mm
Elongation	(ASTM D1000) 300%
Puncture Resistance	(ASTM E 154) 230 N
Adhesion - 180° Peel	(ASTM D1000) 4.0 N/mm
Water vapour transmission	(ASTM E96) <0.3g/m^2/24h
Water penetration % joint	(MOAT 27-5.1.4) NIL
Minimum application temperature	5°C

SHEETSEAL PRIMER

Form	Bitumen solution
Flash point	34°C
Coverage *	7m^2 per litre/coat
Drying time	2 - 4 hours
Overcoating time	Minimum: when touch dry Maximum: 7 days

The above performance figures are typical values and should not be considered a product specification.

ANCILLARY PRODUCTS

RIW produce a range of ancillary products for use with Sheetseal 226 which include:

Cementfill FC - Cement based waterproof fairing coat and repair mortar for filling minor holes, voids and defects.
Cementfill HB - Cement based waterproof high build repair mortar for profiling and providing fillets.
Double Drain - a drainage board which protects the membrane during backfilling operations, and also promotes

drainage of water away from the structure.
Protection Board - a 3mm thick bitumen impregnated fibre board to prevent damage to the waterproof membrane during backfilling operation.

Adhesive Tape - a 150mm wide double sided tape for temporarily adhering Protection Board or Double Drain to the membrane.
Sheetseal 9000 DPC - a range of high performance polymeric dpc's, and pre-formed cavity trays, compatible for use with all RIW membranes.

CONSTRUCTION

GENERAL

All construction should conform with the Building Regulations, Codes of Practice and British Standards in current use at the time the building is being constructed. In particular it is recommended that reference is made to BS8102:2009.

PREPARATION

All Surfaces: Should be smooth clean, dry (to a depth of 1-2mm), sound and free from frost, oil, grease, condensation and other contamination. Any voids or hollows must be made good to a flush finish with a suitable filler. Any sharp edges or high points should be eliminated. Powdery or flaking surfaces should be removed by suitable means.
Internal corners should be eased with a 50 x 50mm cement fillet (see ancillary products), to assist application, similarly, external corners should be chamfered or rounded where required.

Concrete surfaces: Horizontal surfaces should preferably be smooth, however lightly tamped (3-4mm peak to trough profile), brushed or floated surfaces may also be acceptable.

Masonry: Should be sound with joints flush pointed or 'bagged out' with Cementfill FC or similar before the membrane is applied. Open textured surfaces should be sealed with Cementfill FC or a sand/cement slurry or render to provide a suitable surface. If existing surfaces are very rough, they may require rendering.

APPLICATION

General: Application of Sheetseal 226 and Sheetseal Primer should not be attempted in temperatures below 5ºC. Apply one coat of Sheetseal Primer to all vertical or inclined surfaces. The primer should be applied where required by brush, roller or spray at a coverage of approximately 7m^2/litre. The primer should dry in 2-4 hours depending on site conditions. The primer should be covered as soon as it is dry and should not be left exposed for longer than seven days.
Do not use Sheetseal Primer onto insulation boards or insulated concrete formwork (ICF) systems.Vertical work should be supported immediately after application, or temporary support provided. Maximum unsupported height of membrane should not exceed 200mm.

To apply the Sheetseal 226, remove the separating paper progressively from one end of the roll, and press the adhesive coated surface firmly onto the prepared substrate. Smooth out the membrane working from the centre to the edges to remove air pockets. Any remaining bubbles should be slit with a sharp knife and re-adhered. Patches of sufficient size must then be applied over the slits or any other damaged areas to maintain a minimum overlap of 100mm. A hard roller should then be used to firm down the whole area. The peel off selvedge strip should then be removed from the top edge to reveal a bitumen surface.

Subsequent rolls should then be lapped onto the previous roll. Edge laps should be a minimum of 50mm beyond the selvedge, onto the backing film, and end laps 100mm. The overlaps should not be primed, but should be rolled with a hard roller, to ensure good adhesion.

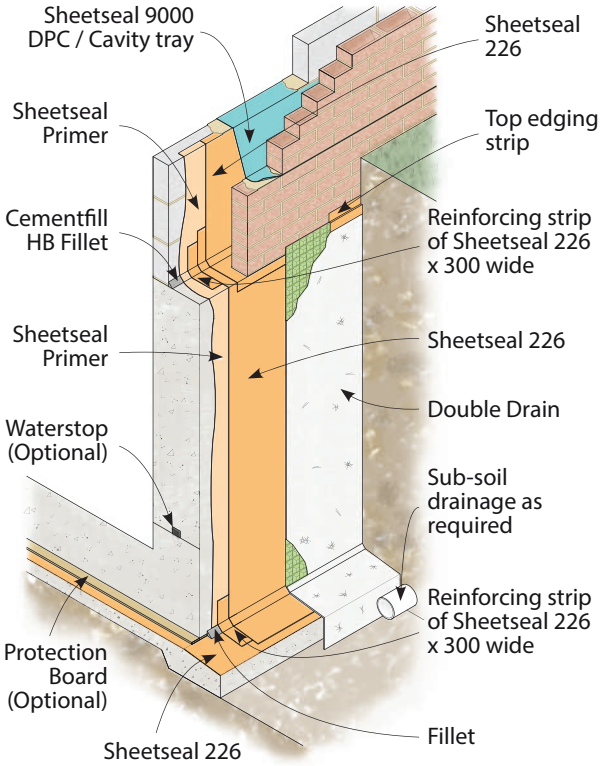
Sheetseal 226 is not designed to be left exposed and should be protected from U.V. light within 28 days of application.

Interior and exterior corners should be treated as illustrated in Detail 7 of this literature. The full membrane should then be applied.

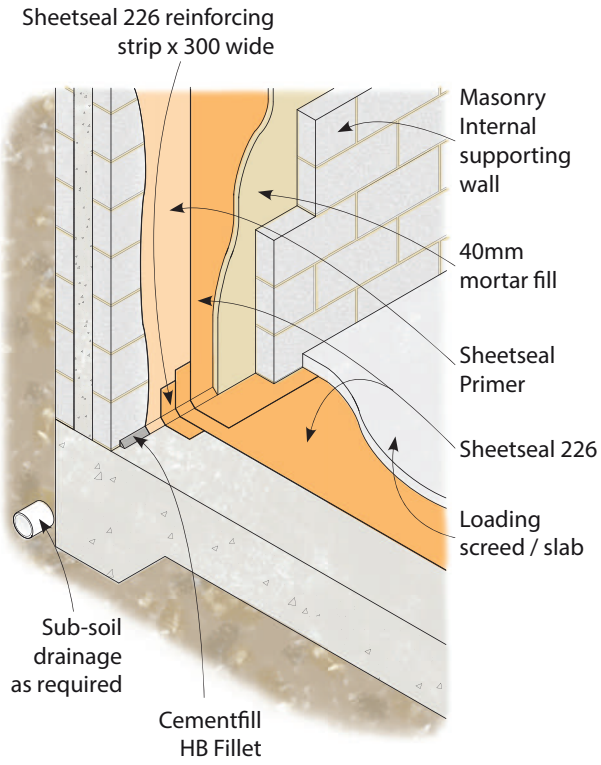
Internal angles and corners should be covered with a 300mm strip of Sheetseal 226 applied into the angle. The full membrane should then be dressed into the angle to form a triple layer as illustrated in Detail 5 of this literature.

External corners should be covered with a 300mm wide strip of Sheetseal 226. The full membrane is then applied ensuring that overlaps occur at the angle to give three-layer protection as illustrated in Detail 6 of this literature. Sheetseal 226 is available in 300mm wide rolls to assist in carrying out angles and projections.

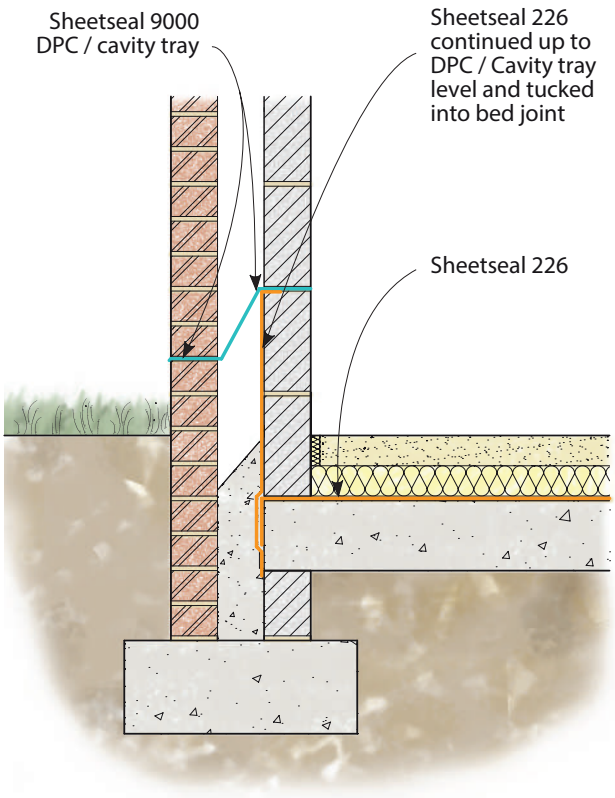
Service entries: Apply a starred patch around all pipe and service entries followed by a band of membrane to cover the points of the star, as illustrated in Detail 8 of this literature.



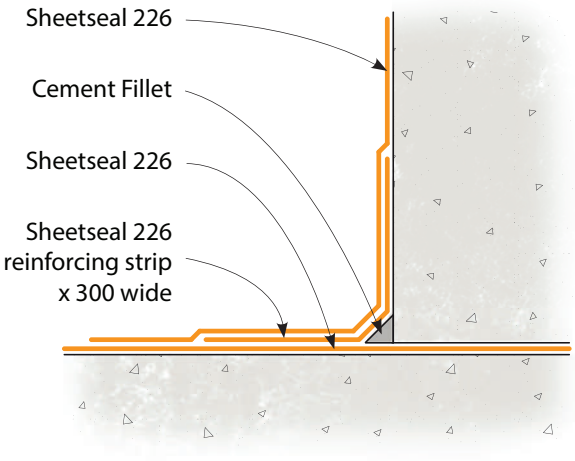
Detail 1 - External Tanking



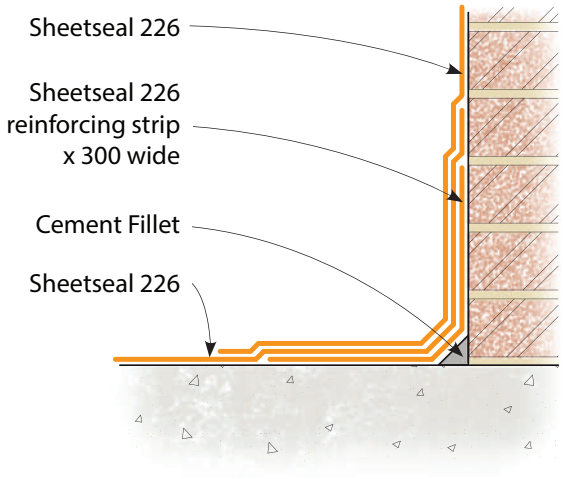
Detail 2 - Internal Tanking



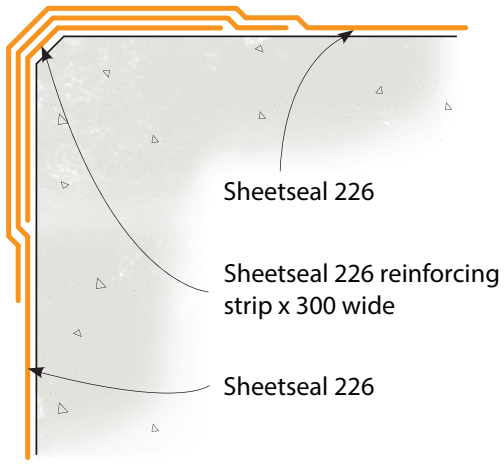
Detail 3 - Ground Floor DPM



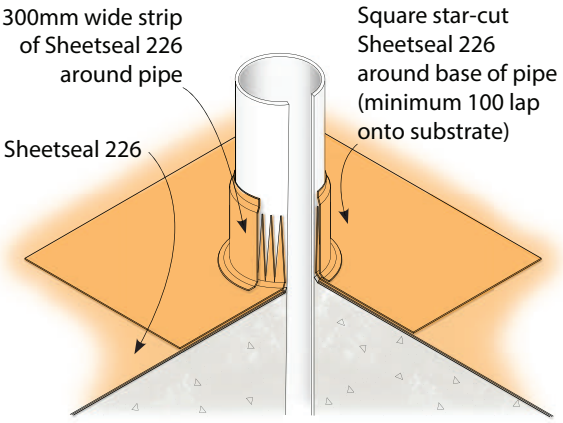
Detail 4 - External Continuity detail



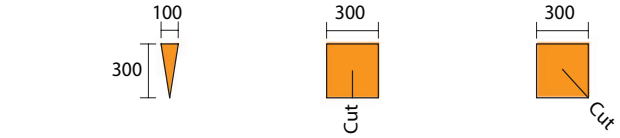
Detail 5 - Internal angle

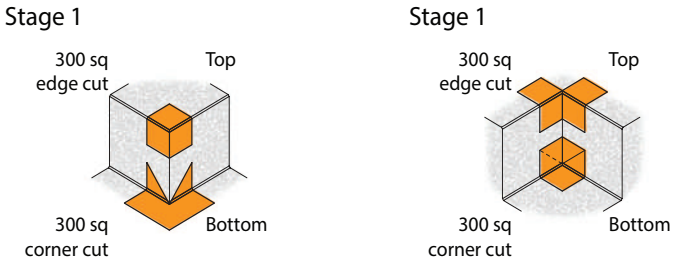


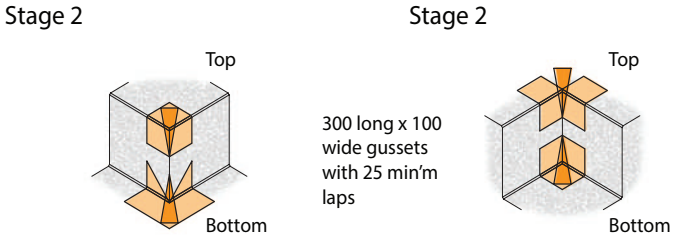
Detail 6 - External angle

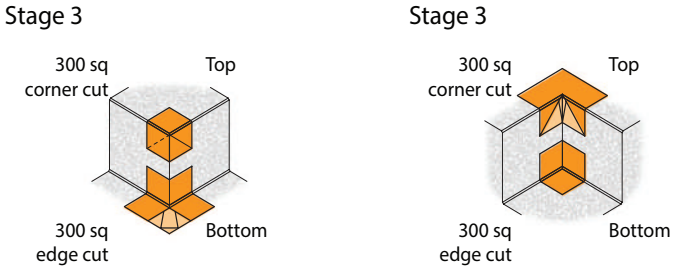


Detail 8 - Pipe Service entry









Exterior Corner

Detail 7

Interior Corner

Detail 7

SPECIFIC USES

Tanking: Sheetseal 226 must always be fully supported, to resist hydrostatic pressure, when used for tanking.

External Tanking: Should be carried out as illustrated in Detail 1 of this literature. The horizontal membrane should be laid on a concrete blinding to project at least 200mm beyond the outer face of the structure. The base structural slabs and the walls should be formed, incorporating a fillet at the external base of the wall. The angle should then be treated, as illustrated in Detail 4 of this literature. The remainder of the vertical membrane should then be applied and protected from backfill material using Double Drain or Protection Board to suit.

Internal Tanking: Should be carried out as illustrated in Detail 2 of this literature. A loading coat of brick, block or concrete should be constructed immediately after the membrane has been placed.
If brickwork or blockwork is used a 40mm minimum cavity should be left between the membrane and the loading skin. This cavity must be filled with a sand/cement mortar fill as work proceeds.

Floating floor construction: Sheetseal 226 can be used to provide a water and water vapour barrier under a floating floor system at ground floor level; see Detail 3. When used under insulation the following guidelines should be followed:

a) The insulation boards must be laid butt jointed, with corners and arrises kept intact to ensure overall loading of the membrane.

b) The floor finish must not displace the insulation boards during laying.

SAFETY

Sheetseal Primer is flammable and should be used in well-ventilated areas away from sources of ignition. The product can effect sensitive skins. Gloves or barrier cream should always be used by operatives and hands thoroughly washed at the end of each working period. Do not allow the product to enter watercourses. Full health and safety instructions are contained on the product material safety data sheets, and these must be referred to before use.

SUPPLY

AVAILABILITY

All RIW products can be obtained through Builders Merchants or approved stockists. A list of approved stockists is available from RIW's offices.

PACKAGING

Sheestseal 226:	1050mm x19.05m long rolls. 300mm x 20m long rolls. 150mm x 20m long rolls.
Sheetseal Primer:	5 and 25 litre containers

STORAGE

Sheetseal 226: There are no special requirements, but rolls should be kept upright, under cover and protected from extremes of temperature.

Sheetseal Primer: There are no special requirements. The material may be stored in severe winter environments without any detrimental effect.

TECHNICAL SERVICES

The Technical Department is available to advise on individual projects and to prepare or assist in the preparation of specifications and drawings. A list of experienced applicators of materials is available from RIW's offices.

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