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Technical Data Sheet

CEMSEAL HDPE-SAND

HDPE PRE-APPLIED PREFORMED WATERPROOFING MEMBRANE

DESCRIPTION

CEMSEAL HDPE-SAND pre-applied membrane is a composite sheet of quartz sand finished HDPE fully bonded membrane. The quartz sand finished provides excellent mechanical bond against concrete preventing lateral water migration. The membrane has excellent tensile and elongation properties, high puncture resistance and excellent dimensional stability. Designed to be trafficable and ready for immediate placement of steel reinforcement.

FEATURES AND BENEFITS

- Consistent thickness
- Self-adhesive selvedge
- Unaffected by soil settlement
- Unaffected by wet jobsite conditions
- Simple and quick application, without primer or fillets
- Can be applied to permanent formwork, allowing maximum use of space

RECOMMENDED USE

- Below grade structures
- Sub-structures
- Tunnels and subways
- On-grade structures and podiums
- Zero-lot-line construction such as Diaphragm Wall, CBP, SBP

PRODUCT PROPERTIES

Roll Size	1m (width) x 20m (length)
Appearance	Quartz Sand Finished, White
Thickness	1.2mm

TECHNICAL PROPERTIES

Properties	Test Method	Typical Value
Tensile Strength	ASTM D412	≥ 20.0 N/mm^2
Elongation at Break	ASTM D412	≥ 400%
Water Vapour Transmission	ASTM E96	≤ 0.5g/m^2/hr
Watertightness	EN 1928	No leakage
Lateral Water Migration	ASTM D5385	Passed @ 7 bar
Peel or Stripping Strength	ASTM D903	≥ 1.0 N/mm
Puncture Resistant	ASTM E154	≥ 1000 N

SUBSTRATE PREPARATION

The substrate shall be sound and solid to prevent movement during concrete pour. Substrate shall not have gaps or voids greater than 12 mm.

Horizontal substrate:

The lean concrete or blinding layer shall be well compacted and be free of loose aggregates or sharp protrusions. Surface does not need to be dry but standing water must be removed.

Vertical substrate:

The substrate, formwork and supporting structure must be sound and clean. Surface shall be free of defect and irregularities which might damage the membrane.

APPLICATION

Alignment

Unroll and align carefully before sealing of overlaps.
Side lap: min. 80 mm
End lap: min. 80 mm

Membrane Laying

Unroll the membrane with the HDPE facing the substrate and quartz sand finished facing the direction of concrete pour. The membrane selvedge is self-adhesive to promote ease of overlapping. Peel back the selvedge plastic liner and apply moderate pressure by hand or roller to ensure continuous bond. End laps are sealed with CEMSEAL TAPE-D. End laps must be staggered to prevent build-up of layers.

COMPATIBILITY

CEMSEAL HDPE-SAND range of waterproofing membrane is compatible to be used with CEMSEAL SBS SA and CEMSEAL SEAL-B.

STORAGE AND SHELF LIFE

Storage

CEMSEAL HDPE-SAND should be stored at room temperature between 5°C and 25°C in a shaded, cool, dry and away from direct sun exposure. It shall also be stored at least 2 metres away from direct heat source.

Shelf Life

Expected 12 months shelf life with the above-mentioned storage conditions.

HEALTH AND SAFETY

User must refer to Safety Data Sheet before usage of this product.

BASIS OF TECHNICAL DATA

All technical data provided in this Technical Data Sheet are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Disclaimer:
The information and any recommendations relating to the application and end-use of all CEMSEAL products are provided in good faith based on CEMSEAL's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by CEMSEAL. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions. All users should always refer to the most recent and up to date issue of the Technical Data Sheet for the product concerned, which is available on request. It is recommended that products should always be properly stored, handled and applied under tested and recommended conditions.

For More Information:

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