

MasterSeal HY 495

Ultra-high performance, façade and structural sealant

MATERIAL DESCRIPTION

MasterSeal HY 495 is a high-grade, hybrid Silane terminated polyurethane compound one component moisture curing, low-modulus sealant and adhesive.

TYPICAL USES

MasterSeal HY 495 is a hybrid sealant specially developed for sealing of all types of external or internal facade joints. Expansion joints - Construction joints - Joints in precast elements - External walling and cladding joints - Infill panel joints - Curtain walling - Window and door frame sealing - Bridge and balcony parapets - Retaining walls - Subways - Reservoirs and water retaining structures.

ADVANTAGES

- Free from isocyanates and silicones.
- Excellent adhesion to most building substrates.
- Highly resistance to ageing and weathering.
- Strong, permanently elastic, durable seal.
- Excellent adhesion, without primer to most surfaces.
- Odorless, UV, water, and fungal growth resistant.

STANDARDS

ISO 11600 F25 LM
 SNJF F 25 E
 DIN 18540 F
 DIN 4102-1 fire resistance
 FDA specification
 UBATC-BUTGB

PACKAGING

MasterSeal HY 495 is supplied in boxes of 20 x 600ml sausage.

COLOUR

MasterSeal HY 495 is available in Concrete Grey.

WATCHPOINTS

- Avoid exposure to high levels of chlorine.
- Avoid contact with alcohol, curing silicone sealants and solvent cleaners during cure.
- Yellowing may occur in the product in particular circumstance.
- Among others not recommended for glazing and not for aquaria, PE, PP, Teflon and bituminous surfaces.

TECHNICAL DATA*

Cure mechanism	Evaporation
Density	1.35g/ml
Cure time (23°C 55% RH)	2.5mm/day
Resistance to vertical flow (ISO 7390)	<3mm
Application temperature	+5°C to 40°C
Application rate (3mm / 4 Bar pressure)	150g/min
Shore A hardness (ISO 868)	25
Elongation at Break (ISO 8339)	>350%
Joint Movement	±25%
Temperature Resistance	-30°C till +70°C
E-Modulus at 100% (ISO 8339)	0.35N/mm ²

APPLICATION

Surface Preparation:

To ensure optimum adhesion substrates must be sound, clean, dry, and free from any loosely adherent material which could prevent adequate bond to the substrate.

MasterSeal HY 495 adheres perfectly without the use of a primer to most substrates. Strongly porous substrates (gypsum, aerated concrete, limestone, etc) may need priming. It is good practice to test adhesion before commencing full installation.

Application:

MasterSeal HY 495 shall be applied using a conventional sealant application gun, ensuring enough sealant is applied to facilitate the correct width to depth ratio for the joint. Following the application, the sealant must be tooled into place to ensure adequate adhesion with the joint profile is achieved. Finally, tool to a neat finish using a solution of soap and water onto a gloved finger or tooling stick.

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EQUIPMENT EQUIPMENT

Clean uncured material using soap and water. Cured material can only be cleaned mechanically.

APPLICATION TEMPERATURE RANGE

Minimum +5°C

Maximum +40°C

CONSUMPTION

Applicable joint length with a 600ml cartridge (in meters).

Joint depth (mm)	Joint width (mm) approx.						
	6	8	10	12	15	20	25
6	16.6	12.5	10	8.3	NA	NA	NA
8	NA	NA	NA	NA	5.0	NA	NA
10	NA	NA	NA	NA	NA	3.0	NA
12	NA	NA	NA	NA	NA	NA	1.92

STORAGE AND SHELF LIFE

MasterSeal HY 495 has a shelf life of 12 months for cartridge and sausage from production date when stored in its original packaging at temperatures between 5°C and 25°C.

HEALTH AND SAFETY

Avoid contact with the skin, eyes and clothing.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for several minutes under running water.

DISCLAIMER

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On ingestion:

Drink plenty of water. Do not induce vomiting unless told to by a poison control centre or doctor.

No special measures necessary if stored and handled correctly. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke.

NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

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* Properties listed are based on laboratory controlled tests.