



VELO 85

Semi-Rigid Polyurea
Joint Fill Compound

Rev. 12/20

■ Description

Velo 85 is a semi-rigid polyurea joint filler that is fast setting, UV inhibited, heavy duty and designed to protect the brittle joint edges of commercial, retail and industrial concrete floors from damage by heavy and hard wheeled transport of product. **Velo 85** provides a smooth flat surface for the transportation of goods and people.

■ Uses/Benefits

Velo 85 is not affected by moisture, 100% solids, solvent free, zero VOC's, polishable without smudges or smears, tack free within minutes and open to traffic in less than an hour. One joint filler for all jobs with a Shore A hardness of 85, excellent bonding and elongation properties, easily pigmented with consistent color and equal viscosity of A and B sides for easy mixing. Aromatic formulation is safer for handlers, installers, transporters, and employees.

■ Technical Data

Test data shown are typical values obtained under laboratory conditions. Some variations could be found under varied conditions in the field such as temperature, humidity and type of substrate. Foot traffic is generally acceptable within 3 – 4 minutes. Complies with LEED® IEQ Credit 4.1. Once cured, this product is inert (chemically inactive). Therefore, it is safe to discard and for use in areas subject to inspection for food safety.

Viscosity	ASTM 4016	A=800cpsB=800cps
Solids	100%	
VOC Content	0	
Mix Ratio	1:1	
Gel Time	ASTM D7997	30-50 Seconds
Tack Free	74°F	4 - 5 Minutes
Shore A Hardness	ASTM D-2240	85 - 87A
Tear Strength, Die C	ASTM D624	110 pli
Tensile Strength, psi	ASTM D-412 (7 days)	1800 psi
Elongation	ASTM D-412	162%
Adhesion	ASTM D4541-17	422 – 454 psi

■ Coverage Rates

1 Gallon = 231 cubic inches, or 128 ounces.

1 Gallon = 5.8 (22 oz.) cartridges.

The chart shown here indicates amounts of lineal feet per gallon. Divide by 5.8 for lineal feet of 22 oz. cartridges.

Estimations must include a percentage for waste such as overfill.

Typical deductions for waste range between 10% – 12%.

Joint Width ▼	Joint Depth ►					
	3/4"	1"	1-1/2"	2"	2.5"	3"
1/8"	205'	154'	103'	77'	62'	51'
3/16"	137'	103'	68'	51'	41'	34'
1/4"	103'	77'	51'	39'	31'	26'
3/8"	68'	51'	34'	26'	21'	17'
1/2"	51'	39'	26'	19'	15'	13'

■ Limitations/Storage/Shelf Life

Velo 85 is designed for interior use only. Product may discolor when exposed to UV rays for a prolonged period of time. Store warm and dry. Best temperature range for storage is between 60°F to 85°F. Do not allow **Velo 85** to freeze or the chemicals may coagulate and then require superheating to become homogenous. Best practice: use a blanket of compressed nitrogen to minimize oxidation in any opened container before tightly replacing lid. Six (6) month shelf life in unopened original packaging.

■ Colors/Packaging

Standard color is VB Gray. Custom color matching is available for other stains, dyes, pigments, fillers and paint colors. Available packaging: 10 gallon kits, 22 oz. (600 ml) 1:1 cartridges, custom sized kits per request.

■ Preparation

Joint side walls **MUST** be clean and dry exposing open pores of concrete for best adhesion. Always clean and prep both sides of the joint walls with dustless concrete saws and diamond blades. Joint walls and the surface must be square, not tooled or rounded. Anything other than clean open pores on the side walls is a bond breaker and will compromise the ultimate holding values of the joint filler. Vacuum all debris from joint walls and surface area. Test the surface for staining in an inconspicuous area before proceeding on the entire project. To prevent staining, apply a coat of Ivory soap to the slab surface on both sides of the joint to be a bond breaker.

■ Bulk Mixing

Pre-mix bulk containers of the B side (polyol) for 2 – 3 minutes with a paddle mixer set on low rpm's while adding Velo Bond Color Pack contents. Mix slowly with the paddle near the bottom of the pail so as not to introduce air while mixing. The A side never needs to be mixed prior to mixing with the B side. Keep lids on buckets at all times when not mixing to protect the polyurea from humidity. Best practice: use a blanket of compressed nitrogen to minimize oxidation in any opened container before tightly replacing lid.

■ Cartridges

Vigorously shake cartridges for approximately 1 minute before dispensing to re-blend the mixture of chemicals and color. Securely attach mixing nozzle with reusable retaining nut, install cartridge into tool, hold upright and slowly dispense material to the end of the nozzle to purge any air in the cartridge, direct nozzle down into waste container and dispense small amount of material to ensure cartridge is equalized and color is consistent. Proceed to fill joints. **Note:** Material will cure within the nozzle if dispensing is stopped for a short period of time. When transferring locations, it is recommended to dispense small amounts into a waste container every 20 seconds to avoid curing within the nozzle.

■ Installation

New slabs should be allowed to cure at least 30 days, but the longer the delay the better. If traffic is expected sooner, then joints could be filled early to minimize spalling. If so, budget for additional maintenance and re-filling at a later date due to possible separation from shrinkage while curing. Completely fill joints, slightly overfilling, with a steady cadence being careful not to entrap air. Fill full depth or per jobsite specifications. Once cured, scrape excess **Velo 85** flush to the surface of the floor as smooth as possible. Scraping may be done as early as 15 minutes dependent upon conditions, but it typically is best to wait 30 - 60 minutes. Polishing and/or grinding should first be performed in inconspicuous areas to ensure **Velo 85** has cured enough for these steps.

■ Clean Up/Safety

Cured material can be scraped off the floor and disposed of with other trash. Unmixed product should be mixed and fully cured before disposal. Once cured, this product is inert (chemically inactive). Therefore, it is safe to discard and for use in areas subject to inspection for food safety. Residual fluids and soiled items should be disposed of as required by your local hazardous material regulations. Use all chemical products in well ventilated areas. Handle and wear proper safety attire for protection per SDS documents for this product.

■ Warranty

VeloBond, Inc. solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of VeloBond, no other representations or statements made by VeloBond or its representatives, in writing or orally, shall alter this warranty. VeloBond makes no warranties, implied or otherwise, as to the merchantability or fitness for ordinary or particular purposes of its products and excludes the same. If any VeloBond product fails to conform with this warranty, VeloBond will replace the product at no cost to Buyer. Replacement of any products shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claim breach. Velobond does not authorize anyone on its behalf to make any written or oral statements which in any way alter VeloBond's installation information or instructions in its products literature or on its packaging labels. Any installation of VeloBond products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of VeloBond's products for the Buyer's intended purposes.