

# ZeraJoint™

## Load Bearing Control Joint Filler

### DESCRIPTION

ZeraJoint™ is a 100% solids, two-component, self-levelling, flexible epoxy urethane joint sealant for load bearing saw cut or preformed control joints.

### WHY WE NEED CONTROL JOINTS

Cracking is unavoidable and undesirable in a concrete floor. Shrinkage is one of the main causes for cracking in concrete slabs. As the concrete hardens and dries, it shrinks due to the evaporation of excess mixing water. Both control joints and expansion joints are critical to minimizing cracks in concrete floors. Control joints are used to relieve the stress within a concrete slab by "coaxing" the crack to occur within the joint, where you can't see it. Expansion joints are designed to allow an entire slab to expand and contract without coming into contact with an adjacent slab, wall or floor embedment, such as a column.

### WHERE TO USE

ZeraJoint™ is typically used in facilities such as manufacturing areas, warehouses and loading docks where joints are subject to dynamic loading and impact. ZeraJoint™ is also suitable for repairing interior concrete slabs that have cracked due to settlement or shrinkage.

### BENEFITS

- 100% solids, with very low odour, zero VOC's
- Adheres to both damp and dry concrete surfaces
- Colour coded to ensure uniform mixing
- Convenient one to one mixing ratio for ease of application
- Excellent self-levelling and flow properties

### PROPERTIES: Wet Properties (Measured @ 23°C/74°F)

Mixing Ratio, by volume .....	1 part A: 1 part B
Viscosity (Mixed) .....	4000-5000 cps
Solids Content .....	100 %
Mixed Density.....	1.04 kg/L (8.6 lb./US gal)
Gel Time (200 gm) .....	20 minutes
Cut Time (shaving) .....	8 hours
Colour .....	grey

### CURED PROPERTIES (7 days cured @ 23°C, 50 RH)

Shore Hardness .....	35-40D
(ASTM D2240)	
Abrasion Resistance (ASTM D4060) .....	90- 94mg loss
Taber Abrasion, C-17 Wheel, 1000 cycles	
Pull Out Tensile Adhesion to Concrete.....	4.2 MPa (609 psi)
(ASTM D4541) (concrete failure)	
Water Absorption (ASTM D413) .....	0.5% (by weight)

### SURFACE PREPARATION

Joints to receive ZeraJoint™ must be clean and dry. Remove any dirt, dust, grease, oil or other foreign contaminants from joints. Both sides of joints should be covered with masking tape. Use a bond breaker on the bottom of the joint such as polyethylene film or tape.

### JOINT PREPARATION

No primer is required for dry joints. In the event the joints are not dry, consult your Zeraus Technical representative for primer recommendations.

Power vacuum joint areas to ensure that they are clean to receive the liquid ZeraJoint™. Insert backer rod in joint cavities to ensure the liquid material does not flow beneath the concrete slabs.

### MIXING

Pre-mix part A separately before combining with part B to prevent settling. Combine two equal parts (part A white and part B black) of ZeraJoint™. Mix thoroughly for 2 minutes until a uniform grey colour is achieved. Exercise care not to entrap air while mixing.

### PLACING

Mixed product can be poured from the mixing container manually or alternatively using "Joint Filler Pump" to mix and disperse measured amount of material into the joint. Two passes are generally required to bring the sealant up flush with the floor surface as a neat, even joint, free from "dishing". The second pour must be made before the initial pour sets.

NOTE: The joint must be completely filled with ZeraJoint™ from the bottom up for proper performance. Remove access joint filler from floor surface via razor scraper.

### LIMITATIONS

- Use only for interior horizontal joints.
- Do not use as an expansion joint filler or for applications involving continuous immersion.
- ZeraJoint™ is not designed for use in areas subjected to chemical exposure.
- Concrete temperature must be a minimum of 5°C (40°F) during application.
- ZeraJoint™ may discolour in areas exposed to constant sunlight.

## COVERAGE

For 3.79L (1 U.S. gallon) of mixed product:

WIDTH	DEPTH	LENGTH
3mm (1/8")	19mm (3/4")	60m (197ft)
	25.4mm (1")	45m (148ft)
	38mm (1½")	30m (98ft)
4.5mm (3/16")	19mm (3/4")	41m (135ft)
	25.4mm (1")	31m (102ft)
	38mm (1½")	20m (66ft)
6.4mm (1/4")	19mm (3/4")	31m (102ft)
	25.4mm (1")	23m (76ft)
	38mm (1½")	15m (49ft)

## PACKAGING

7.58 L (2 U.S. gal) unit; 37.8 L ((10 U.S. gal) unit

## CLEAN UP

Clean all tools and equipment with xylene or acetone prior to the material setting.

## SAFETY PRECAUTION

Consult Material Safety Data Sheet (MSDS) for specific instructions.

## STORAGE

Must be stored in a dry heated warehouse. Do not allow to freeze in storage or transport as base resin may crystallize.

## SHELF LIFE

Two years if stored under normal heated warehouse conditions in original unopened containers.

## WARRANTY

"The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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