Technical Data Sheet



CON^{MIC}SHIELD[®] Joint Set

Product Description

CON^{mic}SHIELD[®] Joint Set is a fast setting, nonshrink, light-colored, concrete-matching cementitious patching & repair material designed for horizontal & vertical applications.

General Uses

CON^{mic}SHIELD[®] Joint Set can be used for a variety of concrete repairs such as pipe joints, columns, beams, slabs, steps, sidewalks, driveways, concrete walls and precast members. In areas of spalls CON^{mic}SHIELD[®] Joint Set can be trowelled into place on both horizontal and vertical surfaces. CON^{mic}SHIELD[®] Joint Set contains air entraining agents which make it freeze-thaw resistant.

Features

- High strengths and excellent workability
- Easy to mix and use
- Non-corrosive and non-metallic
- Volume stable
- Resistant to a wide variety of chemicals including oil, grease, salt solutions and diesel fuel
- Excellent bonding characteristics
- · Can be shaved after achieving initial set.
- Provides uniform appearance to existing concrete surfaces

Instructions for use Surface Preparation

The object of good surface preparation is to achieve a clean, sound surface with a good mechanical key. All substrates should be cleaned and free of dust, plaster, oil paint, grease, corrosion deposits and any other contaminants. Excess laitance should be removed by mechanical means. Smooth substrates must be mechanically roughened by scrabbling or needle gun to provide an adequate key. To get maximum bonding, depths of repair areas should be controlled. Extremities of repair area should be recessed at least 3/8". Any steel in the repair area should be exposed around its full circumference and cleaned to bright shiny metal to remove all loose scale and corrosion deposits.

Mixing

Each pail contains a premeasured amount of CON^{mic}SHIELD® Joint Set Additive. Add 3.5 qt. (7 pints) of Additive or less per 50 lb of material to achieve desired consistency. Mix for 2 minutes using a mortar mixer. If mixing by hand, mix until a uniform consistency is achieved. Please note that mixing time, mixed consistency and set will be affected by the temperature of the substrate, additive, material and air.

Application

Before applying, dampen area with water. Leave no standing water. Force the material against the sides and bottom of the repair area. Trowel material level and allow it to take initial set. In hot, dry or windy conditions use an approved ASTM C309 curing compound or CON^{mic}SHIELD® IDENTIFIER.

Cleaning: Water cleanup prior to cure.

Yield: .43 cu. ft. Coverage: 12.5 sq. ft. @ 1/2 "

Proportion/Lb: 2.25 fl oz per pound

Packaging

- 50 lb pails
- 1-Gallon Jug of Additive

Material Requirements For Filling Joints

	Width (Inches)									
Depth (Inches)		0.5	1	1.5	2	2.5	3			
	0.5	248	124	83	62	50	41			
	1	124	62	41	31	25	21			
	1.5	83	41	28	21	17	14			
	2	62	31	21	15	12	10			
	2.5	50	25	17	12	10	8			
	3	41	21	14	10	8	7			
Lineal Feet Per Pail										

Limitations/warning Technical Warning

Not recommended for placing below 40°F (1.7°C) with a maximum of 1" per layer. Do not re-temper after initial set. Must be placed within 16-25 minutes of mixing. Do not add other admixtures to CON^{mic}SHIELD® Joint Set. Do not apply over surfaces that are unsound, frozen or contain frost. Refer to material safety data sheet prior to use.

Typical Performance Data at 72 F/ 50% rH											
7 Pints (7.3 Lbs: 3.3 Kg) of Water Per 50 Lbs of CON ^{mic} SHIELD [®] Joint Set											
PLASTIC	Hardened Properties of CON ^{mic} SHIELD® Joint Set										
Working Time 15 min	Properties	ASTM	1 day (psi)	7 days (psi)	28 days (psi)						
Set Time ASTM C266 Initial - 60 min.	Compressive Strength	C109	3000	5000	6000						
Final - 100 min.	Split Tensile Strength	C496	370	450	500						
Flow ASTM C109 5-10% Durability ASTM C672 25 Cycles Visual Rating 0 (none)	Slant Shear Bond	C1042	1200	1400	1700						
Yield42 cu ft/50 lb bag when mixed with 3.5 quarts of water	Drying Shrinkage	C157	-	-	0.008%						

The Physical properties contained herein were obtained under laboratory conditions at 72° F. Physical properties obtained under field conditions may vary do to environmental variables. Data are subject to reasonable deviation.

Health Warning

Avoid direct contact with skin and eyes. Product contains Portland Cement. May cause irritation and possibly cement burns. Wash exposed skin area promptly with water. In case of eye contact, flood eyes repeatedly with water and call physician. Do not take internally. Harmful if ingested. Keep product out of reach of children.

Warranty and Disclaimer:

The following warranty is made in lieu of all other warranties, expressed or implied. Manufacturer will replace any product if defective within one year from date of purchase. Under no circumstances will manufacturer be responsible for any damage to any surface, nor for personal injuries, if product is used contrary to manufacturer's written directions.

Although the information presented herein is believed to be accurate. ConShield Technologies, Inc. makes no warranty expressed or implied, and further disclaims any liability as to the suitability of such information to particular end use application CON^{mic}SHIELD[®] system. In no event will manufacturer be liable for incidental or consequential damages.

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