

Installation, Operation + Maintenance Manual

JOINTCRETE PRIMER & HEADER INSTALLATION – RECESSED BLOCKOUT APPLICATION

Model(s): EJN-JOINTCRETE PRIMER KIT/ EJN-JOINTCRETE HEADER KIT

GENERAL DESCRIPTION

JointCrete Primer and Header: <u>JointCrete Primer</u> is used to prepare a blockout in advance of using JointCrete Header. It provides excellent adhesion to steel, concrete and asphalt. <u>JointCrete Header</u> is used to secure an expansion joint within the blockout. It has the rigidity of concrete with the flexibility of an elastomeric compound. *JointCrete Primer is used in conjunction with JointCrete Header. Each sold separately.*

Introduction + Safety

GENERAL SAFETY PRECAUTIONS Improper selection, installation, or use can cause personal injury or property damage. It is solely the responsibility of the user, through their own analysis, to select products suitable to the specific application requirements, ensure proper maintenance and use as intended. Follow local, state, and federal regulations for proper installation and operation requirements. Follow all recommended safety precautions for mixing and handling chemicals, including the use of proper work wear, gloves, eye protection, and proper ventilation. SDS sheets should be consulted before starting work.

JointCrete products must be kept dry and protected from moisture until fully cured.

Please read the complete instructions carefully before beginning any work. To ensure proper installation and performance of the product, the following actions must be taken by the installing contractor. Failure to do so will affect the product warranty.

Transportation + Storage

- Inspect all shipments and materials for missing or damaged components and hardware.
- Material must be stored in a clean, dry location.

Preparation

- Locate the packing slip(s) and/or shop drawings.
- Verify that all products listed on the packing slip are included in the package.
- Check the products for damage. If products are damaged, report a freight claim immediately and leave the products in their packaging. If you sign for products without reporting damage, you waive your right to a freight claim and will be responsible for replacement costs.
- Read the instructions thoroughly before beginning installation.

Personal Protective Equipment recommendations (beyond standard jobsite PPE)

- Safety glasses
- Safety boots
- Chemical resistant gloves
- Respirator use required when JointCrete products are applied by spraying

Tool List

- Tape measure
- Level
- Chop saw to cut product to length
- Mixing pails (1 gal & 5 gal)
- Clean white rags
- Duct tape
- Disc grinder
- Roofing paper (to protect substrate)

- Electric drill with jiffy / Helical type mixer
- Broom & dustpan or vacuum
- "Black Beauty" medium grit
- Small paint brushes
- Toluene
- Miter box w/ hand saw with teeth removed
- Putty knives

JointCrete system components:

- JointCrete Elastomeric Header Material Kit: (#EJN-JOINTCRETE HEADER KIT):
 - Part 'A': (#EJN-JOINTCRETE HEADER PART A)
 - o Part 'B': (#EJN-JOINTCRETE HEADER PART B)
 - Part 'C': (#EJN-JOINTCRETE HEADER PART C)
- JointCrete Primer Kit: (#EJN-JOINTCRETE PRIMER KIT)
 - o Part 'A': (#EJN-JOINTCRETE PRIMER PART A)
 - o Part 'B': (#EJN-JOINTCRETE PRIMER PART B)

Preinstallation

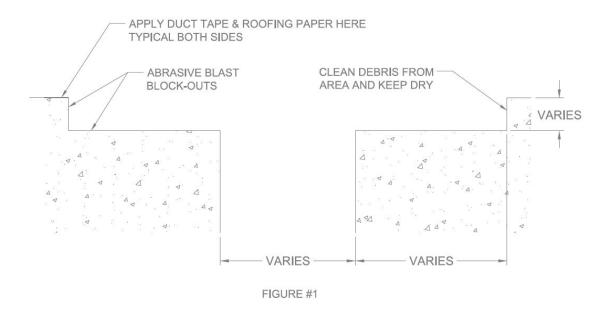
- 1. Prepare blockout area per plans and specification from the engineer.
- 2. JointCrete Header must be supported on underside by structural element and not free floating or cantilevered.

- 3. Substrate must be clean, structurally sound, dry, and free of rust, dirt, oil or other contamination and unapproved patching materials. Remember performance is only as good as the substrate JointCrete Header is applied / bonded to. Make sure the surface is clean by brushing or vacuuming the surface. New concrete shall be a minimum of 85% cured (typically 12-14 days for 28-day cure concrete) before installation.
- 4. Mask all joint edges with duct tape and roofing paper to protect substrate.
- 5. JointCrete Elastomeric Header Kit yields 0.525 cu/ft or more. Aggregate must be always kept dry. Any wet aggregate shall not be used. Store in clean, dry location between 60° 90°F (16°-32°C) and do not allow resins portion to freeze.
- 6. JointCrete Primer is a 1-1/2 gallon unit when mixed (Component 'A & B') and will cover 120 sq ft /1.5 gallon kit.
- 7. The minimum ambient temperature for installation is 45° F (7° C) and rising.
- 8. Installation temperature should be a minimum of 3°F above dew point.
- 9. Sandblast all surfaces (concrete or steel) in which the JointCrete Header will be bonding. Metalized steel may require only a brush-blast to insure a clean surface. All non-metalized steel shall be blasted to SSPC-10 (near white) specification. Remove all sand and debris with oil free compressed air.
- 10. Be sure the temporary form for the joint opening is set per plans and specifications and to fit tight to prevent leakage of resin under or around form. TO PREVENT SURFACE CONTAMINATION – DO NOT USE A FORM RELEASE AGENT.

NOTE: Working time of mixed resins (Part 'A' combined with Part 'B') will vary depending on mass (volume), resin and air temperatures. Higher temperatures and larger volumes will reduce working times, smaller batches and cooler temperatures will increase working and set times. DO NOT ALTER MIX RATIOS. More or less "B" (hardener) will not change working or set time and can severely alter end physical properties (strengths). Never adjust ratio of Component "A" to Component "B". See Technical Data Sheet (TDS) for proper mix ratio or call customer service at 1-800-547-2635 to verify.

INSTALLATION

- 1. Ensure that the proper components are on the jobsite and are staged nearby:
 - a. JointCrete Primer Kit consists of: One three-quarter (3/4) gallon of Part "A", and one three-quarter (3/4) gallon of Part "B". If properly mixed and applied, the JointCrete Primer Kit yield should be 120 sq/ft per kit.
 - b. JointCrete Header Kit consists of: One (1) gallon of Part "A", one (1) gallon of Part "B", and a five (5) gallon bucket of aggregate (Part "C"). If properly installed and buckets scraped empty, the JointCrete Header Kit yield should be 0.525 cu.ft./ Kit.
- 2. Use appropriate personal protective equipment.
- 3. Be sure and properly cover the mixing area(s) on the jobsite with tarps or similar as the Kit material components could stain the substrate, prior to mixing or after. The JointCrete Header Kit is designed to be mixed as a whole unit, as such Nystrom does not recommend mixing partial units.
- 4. BLOCKOUTS: Abrasive blast the substrate blockout surfaces to remove any bond breakers and to prep the surface (see preinstallation notes on previous page). Note: all concrete repairs are to be in accordance with ICRI guidelines. Duct tape and roofing paper should be applied before proceeding. **See Figure 1**.



- 5. Prepare JointCrete Primer by combining Component "A & B" and mix using a low speed (300-500rpm) mechanical mixer (drill and jiffy or helical style mixer) using low speed so as not to whip air into the mixture making sure to scrape sides and bottom of mix container to ensure complete mixing. Do not mix by hand. Apply JointCrete Primer with brush in a thin layer avoiding puddling material. One gallon of Primer should cover 120 sq/ft depending on the profile (roughness) of surface applied to. Prime (coat) all surfaces in which the JointCrete Header will be placed.
- 6. After the proper installation, the primer will look wet. It is required to pour wet-on-wet, and you should have up to 3 hours to install the elastomeric header in the blockout. **See Figure 2**.

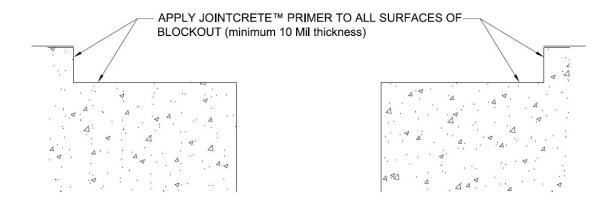


FIGURE #2

7. Mix and place JointCrete Header elastomeric concrete immediately after placing JointCrete Primer as no waiting time is necessary. JointCrete Header material must be placed while Primer is still wet or tacky. DO NOT ALLOW THE JOINTCRETE PRIMER TO DRY BEFORE PLACING THE JOINTCRETE HEADER. If the JointCrete Primer has dried and it has been less than three (3) hours from initial application, a new thin layer will need to be applied. If more than 3 hours has elapsed between application of primer than the surface shall be lightly abraded or sandblasted and cleaned before applying fresh coat of primer and installation of JointCrete Header material.

- 8. Mix JointCrete Header parts "A & B" together first using a low-speed drill (300-500 rpm) and jiffy or helical style mixer, using low speed drill using caution not to whip air into the mixture. Mix for minimum 1 minute then slowly add the supplied dry aggregate. DO NOT USE WET AGGREGATE. Mix thoroughly until uniformly saturated (approximately 1-1/2 minutes) and no dry pockets.
- 9. Place the mixed mortar into the prepared area per shop drawings and specifications. Make sure mortar is thoroughly compacted under any steel or aluminum angles, anchors and within the blockout areas. Trowel flush with surrounding surfaces. *Do not allow mortar to sit in pail as it will shorten working time due to mass.*
- 10. After curing, remove any temporary forms and grind a 1/4" bevel at any joint edges.

Traffic Ready Time:

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95^{\circ} - 80^{\circ} F (35^{\circ} - 27^{\circ} C) = 2-1/2 \text{ hours}

80^{\circ} - 65^{\circ} F (27^{\circ} - 18^{\circ} C) = 3-1/2 \text{ hours}

65^{\circ} - 45^{\circ} F (18^{\circ} - 7^{\circ} C) = 4-1/2 \text{ hours}
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OPERATION

Expansion Joints are designed and built for years of dependable service.

MAINTENANCE

Perform annual inspections to make sure the header system is in position and there is no impedance of joint cover movement. Repair and/or replace as needed.

QUESTIONS?

For more information on installation, repair, or replacement, please contact Customer & Sales Support at 800-547-2635 or visit nystrom.com