****

**EUCOLASTIC 1NS**

**Non-Sag, Single-Component, Polyurethane Hybrid Joint Sealant**

***{Note to Specifier: The paragraphs below are meant to be incorporated into Parts 1, 2 and 3 of a standard CSI 3 Part Format specification, project’s General Structural Notes or directly onto the plans. They must be carefully reviewed by a qualified design professional and edited to meet the particular requirements of the project at hand, assure compliance with any governing building codes, and coordinate with other specification sections and drawings.}***

PART 1: GENERAL

*{Note to Specifier: Insert the following paragraph and sub paragraphs as required for your project. Euclid’s recommended products are shown in italics. More info can be found on these products at* [*www.euclidchemical.com*](http://www.euclidchemical.com) *or by clicking on the product links.}*

1.01 RELATED WORK:

A. Joint Fillers – [Eucolastic](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/polyurethane-sealants/), [Tammsflex](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/polysulfide-sealants/), [Dural 340](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/epoxy-fillers-sealants/dural-340-nssl/), [Qwikjoint UVR](http://euclidchemical.com/products/construction-products/joint-fillers-sealants/polyurea-joint-fillers/euco-qwikjoint-uvr/)

B. Concrete Repair:

1. Vertical and Overhead: [Euco V-100](http://euclidchemical.com/products/construction-products/repair/verticaloverhead-repair/eucorepair-v100/), [Tamms Structural Mortar](http://euclidchemical.com/products/construction-products/repair/verticaloverhead-repair/tamms-structural-mortar/)

2. Horizontal: [Express Repair](http://euclidchemical.com/products/construction-products/repair/horizontal-repair/cementitious-mortars/express-repair/), [VersaSpeed](http://euclidchemical.com/products/construction-products/repair/horizontal-repair/cementitious-mortars/versaspeed/)

3. Form and Pour: [Eucocrete](http://euclidchemical.com/products/construction-products/repair/horizontal-repair/cementitious-mortars/eucocrete/)

C. Crack Repair/Injection: [Dural 452 LV](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/dural-452-lv/), [Dural Fast Set Epoxy Gel](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/dural-fast-set-gel/)

D. Bonding Agents: [Duralprep A.C.](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/duralprep-ac/), [Dural 452 MV](http://euclidchemical.com/products/construction-products/bonding-agents-adhesives/epoxy-based/dural-452-mv/)

E. Waterproofing/Dampproofing : [Tamoseal](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/waterproofing-dampproofing/tamoseal/), [Vandex Super](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/vandex-waterproofing/crystalline-waterproofing/vandex-supersuper-white/), [Hey’Di K-11](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/waterproofing-dampproofing/heydi-k-11/), [Vandex BB75](http://euclidchemical.com/products/construction-products/waterproofing-dampproofing/vandex-waterproofing/cementitious-slurry-coatings/vandex-bb-75/)

F. Architectural Coatings: [Tammscoat](http://euclidchemical.com/products/construction-products/coatings/architectural-wall-coatings/tammscoat/), [Tammolastic](http://www.euclidchemical.com/products/construction-products/coatings/architectural-wall-coatings/tammolastic/)

G. Anti-Graffiti Coatings: AG 100, [AG-400](http://euclidchemical.com/products/construction-products/coatings/architectural-wall-coatings/tamms-ag-400/),

H. Traffic Deck Coatings: [Tammsdeck](http://euclidchemical.com/products/construction-products/coatings/traffic-deck-coatings/urethane-based/tammsdeck-system/), [Flexdeck](http://euclidchemical.com/products/construction-products/coatings/traffic-deck-coatings/urethane-based/flexdeck-system/)

I. Decorative Floor Coatings: [Duraltex](http://euclidchemical.com/products/construction-products/coatings/decorative-floor-coatings/epoxy-based/duraltex/)

J. Epoxy Chemical Resistant Coatings: [Duralkote 240](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duralkote-240/), [Duralkote 500](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duralkote-500/), [Duraltex 1705/07](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duraltex-1705-1707/), [Duraltex 1805/07](http://euclidchemical.com/products/construction-products/coatings/industrial-coatings/epoxy-based/duraltex-1805-1807/)

K. Penetrating Water Repellents:

1. Horizontal and Vertical: [Baracade WB 244](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/baracade-wb-244/), [Baracade 100C](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/baracade-silane-100c/), [Baracade Silane 40 IPA](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/baracade-silane-40-ipa/)

2. Vertical: [Chemstop WB Regular/Heavy Duty](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/chemstop-wb-regularheavy-duty/)

L. Penetrating Epoxy Sealer: [Euco #512 VOX Epoxy Sealer](http://euclidchemical.com/products/construction-products/penetrating-sealersliquid-densifiers/penetrating-sealers/euco-512-vox-epoxy-sealer/)

M. Cathodic Protection: [Sentinel Galvanic Anodes](http://euclidchemical.com/products/construction-products/repair/cathodic-protection/sentinel-galvanic-anodes/)

1.02 JOB SITE CONDITIONS

A. Material shall be stored at temperatures between 40 and 90 deg F.

B. Do not apply Polyurethane Hybrid Sealant to frost filled surfaces. Both substrate and ambient temps shall be 40 deg F. and rising at time of application.

PART 2.0 PRODUCT

2.01 POLYURETHANE HYBRID JOINT SEALANT

A. Non-Sag Polyurethane Hybrid Joint Sealant: Provide single component, non-sag, moisture cure, polyurethane hybrid joint sealant exhibiting the following properties at 75 deg F.

1. Extrusion Rate per ASTM C1183: 93.1 ml/min.

2. Hardness, Shore A per ASTM C661: 25

3. Movement Capability per ASTM C719: +/- 35%

4. Skin Time: 1 hr.

5. Tack Free Time: 3-4 hrs.

6. Abrasion-in-Peel per ASTM C794: Concrete 18-22 Pli

No adhesion loss

7. Stain & Color Change ASTM C510: No stain/No visible color change

8. Accelerated Aging per ASTM C793: Pass

9. Product:

1. Euclid Chemical Company (The): Eucolastic 1NS [www.euclidchemical.com](http://www.euclidchemical.com)
2. Color: **[Black][Bronze][Gray][Limestone][Stone][White]**

B. Manufacturer shall have ISO 9001 Quality Certification.

PART 3.0 EXECUTION

3.01 SURFACE PREPARATION

A. New concrete must be a minimum 28 days old.

B. Joint surfaces shall be structurally sound, clean, dry, free of dust, dirt, paint, efflorescence, laitance and other contaminants that will prevent the proper adhesion of the Non-Sag Polyurethane Hybrid Joint Sealant.

C. The final step in cleaning shall be the complete removal of all residue by solvent wiping the joint.

D. Substrates shall be completely dry at time of Non-Sag Polyurethane Hybrid Joint Sealant application.

3.02 POLYURETHANE HYBRID JOINT SEALANT INSTALLATION:

*{Note to Specifier: EUCOLASTIC PRIMER is required to prime the joint facing when the product will be used on nonporous surfaces (metal, granite, etc.) or when the sealant will be underwater. Insert paragraph below in primer will be required.}*

**[A. Apply manufacturer’s recommended primer liberally with a clean brush or roller. Do not allow the primer to puddle or pond. Use with adequate ventilation. Polyurethane Hybrid Joint Sealant must be applied within 8 hours after primer application.]**

B. Place manufacturer’s recommended backer rod or bond breaker tape into the joints and make sure they are secured in place.

C. Install Non-Sag Polyurethane Hybrid Joint Sealant into joints per manufacturer’s published instructions using standard caulking guns. Once the joint is full, tool the sealant using a rounded spatula to create a concave surface.

D. Width to depth ratios shall be equal for joints that are 1/4" (6 mm) to 1/2" (13 mm) in width. If joint width is 1/2" (13 mm) to 1” (25 mm), the depth of Joint Sealant shall be 1/2 the width, with 1/2” (13 mm) being the maximum allowable depth of Joint Sealant.

END OF SECTION