



The Chemical Company

## SECTION 07 92 13

### SONOLASTIC NP 2

#### NOTE TO SPECIFIERS:

THE PURPOSE OF THIS GUIDE SPECIFICATION IS TO ASSIST THE SPECIFIER IN DEVELOPING A PROJECT SPECIFICATION FOR THE USE OF BASF BUILDING SYSTEMS' PRODUCTS. IT IS NOT INTENDED TO BE A "STAND ALONE" DOCUMENT, NOR TO BE COPIED DIRECTLY INTO A PROJECT MANUAL. THIS GUIDE SPECIFICATION WILL NEED TO BE CAREFULLY REVIEWED FOR APPROPRIATENESS FOR THE GIVEN PROJECT AND EDITED ACCORDINGLY TO COMPLY WITH PROJECT-SPECIFIC REQUIREMENTS.

#### PART 1 - GENERAL

##### 1.1 SYSTEM DESCRIPTION

- A. Section Includes:
  - 1. Joint sealants designed for interior and exterior above grade applications.
- B. Related Sections:

EDIT NOTE: IF RETAINING RELATED SECTIONS ARTICLE, DELETE SECTIONS FROM THIS LIST OR ADD SECTIONS PER PROJECT REQUIREMENTS.

- 1. Section 03 30 00 – Cast-In-Place Concrete.
- 2. Section 04 21 00 – Masonry Assemblies Unit Masonry.
- 3. Section 07 95 13 – Expansion Joint Cover Assemblies.
- 4. Section 07 62 00 – Flashing and Sheet Metal Flashing and Trim.
- 5. Section 07 84 00 – Firestopping.
- 6. Section 08 41 00 – Aluminum Entrances and Storefronts.
- 7. Section 08 81 00 – Glass Glazing.
- 8. Section 32 12 13 – Asphalt Paving.
- 9. Section 32 13 13 – Concrete Paving.

##### 1.2 SYSTEM DESCRIPTION

- A. Design Requirements:
  - 1. Design number of joints and joint widths for maximum of plus or minus 25 percent movement.
  - 2. Design depth of sealant to be 1/2 width of joint.
    - a. Maximum Depth: 1/2 inch (13 mm).
    - b. Minimum Depth: 1/4 inch (6 mm).
    - c. Maximum recommended width: 2 inches (51 mm).
- B. Performance Requirements: ASTM C 920 Type M, Grade NS, Class 25, Use NT, T, M, A, G and O.

##### 1.3 SUBMITTALS

- A. Comply with Section 01 33 00.
- B. Product Data: Submit manufacturer's technical bulletins and MSDS on each product.
- C. Samples:
  - 1. Initial Selection Purposes: For each product exposed to view, manufacturer's standard bead consisting of strips of actual products showing full range of colors available.



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2. Verification: 2 sets of each type and color of joint sealant required. Install joint sealant Samples in 1/2 inch wide joints formed between two 6 inch long strips of material matching appearance of exposed surfaces adjacent to joint sealants.
- D. Submit laboratory tests or data validating product compliance with performance criteria specified.
  - E. Submit list of references from 5 projects similar in scope to this Project. Include contact name and phone number of person charged with oversight of each project.

#### 1.4 QUALITY ASSURANCE

- A. Comply with Section 01 40 00.
- B. Qualifications:
  1. Manufacturer Qualifications: Company regularly engaged in manufacturing and marketing of products specified in this Section.
  2. Manufacturer Qualifications: Company shall be ISO 9001:2000 Certified.
- C. Installer Qualifications: Qualified to perform Work specified by reason of experience or training provided by product manufacturer.
- D. Mock-Ups:
  1. At start of Project, perform mock-up of required sealant Work at 1 area of building. Perform minimum of 1 mock-up for each different combination of substrates to be sealed. Coordinate mock-up areas with Architect.
  2. Install mock-ups and test in presence of sealant manufacturer's authorized representative and Architect to assure installation procedures are consistent with warranty requirements.
  3. After sealant has achieved sufficient cure as coordinated with manufacturer's representative, conduct adhesion pull-tests, or non-destructive testing, at discretion of Architect. Conduct tests per ASTM C1521.
    - a. Confirm results of adhesion tests as acceptable by Architect, Owner or Owner's representative, and sealant manufacturer prior to proceeding with Work.
  4. Leave approved mock-ups in place to establish standards and guidelines for acceptable installation of sealant Work and acceptable appearance.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with Section 01 60 00.
- B. Deliver products in original factory packaging bearing identification of product, manufacturer, and batch number. Provide Material Safety Data Sheets for each product.
- C. Store products in a location protected from freezing, damage, construction activity, precipitation, and direct sunlight per manufacturer's recommendations.
- D. Condition products to approximately 60 degrees F (16 degrees C) to 70 degrees F (21 degrees C) for use per manufacturer's recommendations.
- E. Handle products with appropriate precautions and care as stated on Material Safety Data Sheet.

#### 1.6 PROJECT CONDITIONS

- A. Do not use products under conditions of precipitation, or in inclement or freezing weather. Verify that substrates are clean, dry, and frost-free. Use appropriate measures for protection and supplementary heating to ensure proper curing conditions per manufacturer's recommendations if application during inclement weather occurs.



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## 1.7 WARRANTY

- A. Provide manufacturer's 5 year standard material warranty.
- B. Include coverage for replacement of sealant materials which fail to achieve water tight seal, exhibit loss of adhesion or cohesion, or do not cure, provided sealant has been installed per manufacturer's recommendations.
- C. Warranty Exclusions: Failure resulting from excess movement, concrete shrinkage, structural cracks or defects, faulty construction, faulty design, faulty materials (other than joint sealants), improper installation, misuse of structure, settlement, or accident, fire, or other casualty or physical damage.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products from the following manufacturer:
  - 1. BASF Building Systems  
889 Valley Park Drive  
Shakopee, MN 55379  
Customer Service: 800- 433-9517  
Technical Service: 800-243-6739  
Direct Phone: 952-496-6000  
Internet: www.BASFbuildingsystems.com
- B. Substitutions: Comply with Section [01 60 00] [ \_\_\_ \_\_\_ \_\_\_ ].
- C. Specifications and Drawings are based on manufacturer's proprietary literature from BASF Building Systems. Other manufacturers shall comply with minimum levels of material, color selection, and detailing indicated in Specifications or on Drawings. Architect will be sole judge of appropriateness of substitutions.

### 2.2 MATERIALS

- A. Polyurethane Sealant: Three-component, highly flexible, high performance, non-priming, polyurethane sealant, ASTM C920 Type M, Grade NS, Class 25, Use NT, T, M, A, G and O., Canadian Specification CAN/CGSB-19.24-M90, Classification MCG-2-40-A-N, No. 81029; UL classified (fire resistance):
  - 1. USDA compliant for use in meat and poultry areas.
  - 2. Acceptable Product: Sonolastic® NP 2™ by BASF Building Systems.

### 2.3 COLOR

- A. Sealant Colors: Selected by Architect from manufacturer's full color range.

SELECT PARAGRAPH ABOVE OR MAKE SELECTION BELOW. DELETE COLORS NOT USED ON PROJECT.

- 1. Color:
  - a. White.
  - b. Off-white.
  - c. Limestone.
  - d. Stone.
  - e. Tan.
  - f. Aluminum Gray.



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- g. Medium Bronze.
- h. Special Bronze.
- i. Redwood Tan.
- j. Black.
- k. Chrome Gray.
- l. Cloud Blue.
- m. Quartz.
- n. Haze Gray.
- o. Colonial Blue.
- p. NP2 Off White.
- q. Parchment.
- r. Green Mist.
- s. Lime Gray.
- t. Irish Green.
- u. Pebble.
- v. Parkland.
- w. Natural Gray.
- x. Cameo.
- y. Desert Tan.
- z. Brick Buff.
- aa. Beachwalk.
- bb. Special Ivory.
- cc. Soft Blush.
- dd. Riverbend.
- ee. Brown Berry.
- ff. Special Tan.
- gg. Cream.
- hh. Shellside.
- ii. Chrome Pink.
- jj. Brick Red.
- kk. Wine.
- ll. Special White.
- mm. Quick Silver.
- nn. Steel Gray.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Comply with Section 01 70 00.
- B. Inspect areas involved in Work to establish extent of Work, access, and need for protection of surrounding construction.
- C. Examine joints for defects that would adversely affect quality of installation.
- D. Provide additional joint preparation, beyond that outlined in Specifications, as required by sealant manufacturer and Architect's recommendations based on mock-ups and field adhesion tests.



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### 3.2 PREPARATION

- A. Remove loose materials and foreign matter that impair adhesion of joint sealant.
- B. Clean joints as required to expose sound surface free of contamination and laitance.
- C. Ensure structurally sound surfaces, dry, clean, free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing, curing and parting compounds, membrane materials, and other foreign matter.
- D. Concrete, Stone, and Other Masonry:
  - 1. Clean by grinding, sandblasting, or wire brushing to expose sound surface free of contamination and laitance.
- E. Wood:
  - 1. Clean new and weathered wood. Scrape away loose paint to bare wood. If coatings cannot be removed, test coatings to verify adhesion of sealant or determine appropriate.
- F. Metal:
  - 1. Remove scale, rust, and coatings from metal to expose bright white surface. Remove protective coatings as well as chemical residue or film.
  - 2. Aluminum Frames: Remove clear lacquer before application of joint sealants. If coatings cannot be removed, test coatings to verify adhesion of sealant or determine an appropriate primer.
  - 3. Prime the following surfaces with primer recommended by joint sealant manufacturer:

#### DELETE THE FOLLOWING MATERIALS NOT REQUIRED FOR PROJECT.

- a. Copper.
- b. Stainless steel.
- c. Galvanized steel.
- d. Fluorocarbon (Kynar) coatings.
- 4. Remove other protective coatings or finishes that could interfere with adhesion.

### 3.3 PRIMING

- A. Where circumstances or substrates require primer, comply with the following requirements:
  - 1. Apply primer full strength with brush or clean, lint-free cloth. Apply primer to a light, uniform coating. Porous surfaces require more primer. Do not over apply. Do not apply primer onto face of substrate.
  - 2. Allow primer to dry before applying joint sealants. Depending on temperature and humidity, primer will be tack free in 15 to 120 minutes.
  - 3. Prime and seal on same workday.

### 3.4 MIXING

- A. Mix sealant and color pak per manufacturer's printed instructions.

### 3.5 INSTALLATION

- A. Back-Up Material:
  - 1. Install appropriate size backer rod, larger than joint where necessary per manufacturer's recommendations, and in manner to provide concave sealant profile.



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2. Where joint depth does not permit installation of backer rod, install adhesive-backed polyethylene bond-breaker tape along entire back of joint to prevent 3-sided adhesion of joint sealant.

B. Sealant:

1. Verify that temperature and moisture conditions are within manufacturer's acceptable limits.
2. Using fresh sealant and equipment that is in proper working order, completely fill joint with sealant, filling from bottom up to avoid entrapping air.
3. Using clean, dry tool with rounded edge, and of appropriate width for each joint, tool freshly installed sealant to provide preferred concave profile, to ensure intimate contact between sealant and substrate, and to provide neat appearance. Where surface aggregate does not permit proper tooling, install sealant and backer rod so that face of joint is recessed behind exposed aggregate, and sealant is bonded to firm, even surface.
4. Use dry tooling method. Do not use tooling agents such as soapy water or solvents that have not been approved by sealant manufacturer.

### 3.6 CURING TIME

- A. Curing of joint sealants varies with temperature and humidity. The following times assume 75 degrees F (24 degrees C), 50 percent relative humidity, and joints 1/2 inch (13 mm) wide by 1/4 inch (6 mm).
1. Skins: Overnight or within 24 hours.
  2. Functional: Within 3 days.
  3. Full Cure: Approximately 1 week.

### 3.7 INSPECTION

- A. During execution of Work, inspect Work to assure compliance with manufacturer's guidelines, these Specifications when they exceed manufacturer's guidelines, and good construction practice.
1. Refer to latest revision of ASTM C1521 for test methods and frequency.
  2. Allow inspections of Work and assist in testing requested by manufacturer's representative and Architect.
- B. Non-Compliant Work: If inspections reveal non-compliant Work or Work that was not installed per Specifications, and/or manufacturer requirements, remove adjacent Work until a location is reached where installation was performed properly. Assist in spot-checking of remainder of Work.

### 3.8 CLEANING

- A. Remove uncured sealant and joint filler with xylene, toluene, MEK, or other sealant manufacturer approved cleaning agent.
- B. Remove cured sealant by cutting with sharp-edged tool.
- C. Remove thin films by abrading.
- D. Remove debris related to application of sealants from Project site per applicable regulations for hazardous waste disposal.

### 3.9 PROTECTION

- A. Protect Work from contaminating substances and damage resulting from other construction operations or other causes so that sealed joints are without deterioration or damage at time of Project completion.



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END OF SECTION