SECTION 07 91 23

BACKER RODS FOR SEALANTS

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\*\* NOTE TO SPECIFIER \*\* Alcot Plastics Ltd.; backer rods.  
This section is based on the products of Alcot Plastics Ltd., which is located at:  
31 Malcolm Rd.  
Guelph, ON, Canada N1K 1A7  
Tel: 519-767-2899  
Fax: 519-767-1093  
Email: [request info (info@alcotplastics.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Alcot+Plastics+Ltd.&coid=49939&rep=&fax=519-767-1093&message=RE:%20Spec%20Question%20(07923alc):%20%20&mf=)  
Web: <https://alcotplastics.com>   
 [ [Click Here](http://www.arcat.com/arcatcos/cos49/arc49939.html) ] for additional information.  
Founded in 1983 in Milton, Ontario, Alcot Plastics Ltd. gained a reputation of being a responsive and qualified manufacturer of extruded polyethylene foam products. Jan Alac, the founder and owner of the company, envisioned a process of polyethylene foam extrusion that was easier and better than the complicated method used by his contemporaries. When that vision was brought to reality, the resulting system turned out to be far superior in terms of product quality and production efficiency.  
Jan Alac's son, John Alac, joined the company to further bring innovative outside-of-the-box approaches to development. With insight from both generations, Alcot Plastics is capable of continuous innovation and introduction of new products, such as foam sheets, screening spline and soft backer rod solutions, custom bottle stoppers, and more polyethylene foam products.  
Alcot Plastics Ltd. continued on a path of rapid expansion as it moved to Acton in 1985, and eventually expanded to Guelph, Ontario in 2012. Its present facility, geared to accommodate the extensive client base, is four times larger than the one in Acton.

1. GENERAL
   1. SECTION INCLUDES
      1. Backer rods for sealants.
   2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 41 16 - Precast Concrete Slabs.
    2. Section 04 20 00 - Unit Masonry.
    3. Section 04 40 00 - Stone Assemblies.
    4. Section 07 91 23 - Backer Rods.
    5. Section -
    6. Section 08 12 00 - Metal Frames.
    7. Section 08 43 13 - Aluminum-Framed Storefronts.
    8. Section 08 54 13 - Fiberglass Windows.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM International (ASTM):
       1. ASTM C 1016 - Standard Test Method for Determination of Water Absorption of Sealant Backing (Joint Filler Material.
       2. ASTM C 1253 - Standard Test Method for Determining the Outgassing Potential of Sealant Backing.
       3. ASTM C 1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants.
       4. ASTM D 1622 - Standard Test Method for Apparent Density of Rigid Cellular Plastics.
       5. ASTM D 1623 - Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
       6. ASTM D 5249 - Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Storage and handling requirements and recommendations.
        3. Installation methods.
  2. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Minimum 10 year experience manufacturing similar products.
     2. Applicator Qualifications: Company specializing in performing work of this section with minimum three years documented experience.
  3. DELIVERY, STORAGE, AND HANDLING
     1. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
     2. Handling: Handle materials to avoid damage.
  4. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Alcot Plastics Ltd., which is located at: 31 Malcolm Rd.; Guelph, ON, Canada N1K 1A7; Tel: 519-767-2899; Fax: 519-767-1093; Email: [request info (info@alcotplastics.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Alcot+Plastics+Ltd.&coid=49939&rep=&fax=519-767-1093&message=RE:%20Spec%20Question%20(07923alc):%20%20&mf=); Web: <https://alcotplastics.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
  1. BACKER RODS

\*\* NOTE TO SPECIFIER \*\* Alcot Plastics Backer Rods are used as a backup material for construction joints and applications that require sealant. They perform as depth control for most known cold applied sealants. Sealants will not adhere to the backer rod and no bond breaker is required. Compatible with urethane, silicone, acrylic, butyl, polysulfide, latex and chinking sealants. For use in expansion and contraction joints, window glazing, curtain wall construction, parking decks, bridge and highway pavement maintenance, log home chinking. Delete if not required.

* + 1. Alcot Plastics Backer Rod: Closed cell, resilient, water-resistant extruded polyethylene backer rod, black color.
       1. Physical Properties:
          1. Meets ASTM D5249 Type 3 and ASTM C1330 Type C.
          2. Chemically inert and non-staining.
          3. Resists gasoline, oil, and most solvents.
          4. Will not adhere to sealants.
          5. Density:, 1.3-1.9 lbs/cu.ft.
          6. Water absorption, Less than 0.5% by volume.
          7. Temperature range, -90 degrees F to 190 degrees F.
          8. Compression recovery, Greater than 90 percent.
          9. Compression deflection, 5 psi.
          10. Tensile strength, Greater than 29 psi.
       2. Size:

\*\* NOTE TO SPECIFIER \*\* Delete sizes not required.

* + - * 1. Diameter: Multiple sizes as required for joint sizes indicated on the Drawings.
        2. Diameter: 1/4 inch (6 mm), for joints 3/16 inch (5 mm) or less.
        3. Diameter: 3/8 inch (10 mm), for joints 1/4 inch (6 mm) or less.
        4. Diameter: 1/2 inch (13 mm), for joints 3/8 inch (10 mm) or less.
        5. Diameter: 5/8 inch (16 mm), for joints 1/2 inch (13 mm) or less.
        6. Diameter: 3/4 inch (19 mm), for joints 5/8 inch (16 mm) or less.
        7. Diameter: 7/8 inch (22 mm), for joints 11/16 inch (18 mm) or less.
        8. Diameter: 1 inch (25 mm), for joints 3/4 inch (19 mm) or less.
        9. Diameter: 1-1/4 inch (32 mm), for joints 7/8 inch (22 mm) or less.
        10. Diameter: 1-1/2 inch (38 mm), for joints 1-1/8 inch (29 mm) or less.
        11. Diameter: 2 inch (51 mm), for joints 1-5/8 inch (41 mm) or less.
        12. Diameter: 2-1/2 inch (63 mm), for joints 2 inch (51 mm) or less.
        13. Diameter: 3 inch (76 mm), for joints 2-1/2 inch (63 mm) or less.
        14. Diameter: 4 inch (10 mm), for joints 3 inch (76 mm) or less.

\*\* NOTE TO SPECIFIER \*\* Alcot Plastics Soft Type Backer Rods are used as a backup material for construction joints and applications that require sealant. They perform as depth control for most known cold applied sealants and help sealant for optimum hour-glass shape. Sealants will not adhere to the backer rod and no bond breaker is required. Compatible with urethane, silicone, acrylic, butyl, polysulfide, latex and chinking sealants. For use in expansion and contraction joints, window glazing, curtain wall construction, parking decks, bridge and highway pavement maintenance, log home chinking. Delete if not required.

* + 1. Alcot Plastics Soft Type Backer Rod: Soft, non-gassing, pliable, extruded bi-cellular polyethylene backer rod, water-resistant outer skin, black color.
       1. Physical Properties:
          1. Meets ASTM C1330 Type B.
          2. Chemically inert and non-staining.
          3. Resists gasoline, oil, and most solvents.
          4. Will not adhere to sealants.
          5. Density (ASTM D 1622), 1.6-2.0 lbs/cu.ft.
          6. Outgassing (number of bubbles) (ASTM C 1253), 0.
          7. Water absorption (ASTM C 1016, Procedure B), Less than 0.03 grams/cc.
          8. Temperature range, -90 degrees F to 190 degrees F.
          9. Compression recovery (ASTM D 5249), Greater than 97 percent.
          10. Tensile strength (ASTM D 1623), 25-50 psi.
       2. Sizes:

\*\* NOTE TO SPECIFIER \*\* Delete sizes not required.

* + - * 1. Diameter: Multiple sizes as required for joint sizes indicated on the Drawings.
        2. Diameter: 3/8 inch (10 mm), for joints 3/16 inch (5 mm) to 1/4 inch (6 mm).
        3. Diameter: 5/8 inch (16 mm), for joints 3/8 inch (10 mm) to 1/2 inch (13 mm).
        4. Diameter: 7/8 inch (22 mm), for joints 1/2 inch (13 mm) to 3/4 inch (19 mm).
        5. Diameter: 1-1/8 inch (29 mm), for joints 3/4 inch (19 mm) to 7/8 inch (22 mm).
        6. Diameter: 1-1/2 inch (38 mm), for joints 7/8 inch (22 mm) to 1-1/4 inch (32 mm).
        7. Diameter: 2 inch (51 mm), for joints 1-1/4 inch (32 mm) to 1-1/2 inch (38 mm).
        8. Diameter: 2-1/2 inch (63 mm), for joints 1-1/2 inch (38 mm) to 2 inch (51 mm).
        9. Diameter: 3 inch (76 mm), for joints 2 inch (51 mm) to 2-1/2 inch (63 mm).
        10. Diameter: 4 inch (10 mm), for joints 2-1/2 inch (63 mm) to 3 inch (76 mm).

1. EXECUTION
   1. EXAMINATION
      1. Verify substrate surfaces and joint openings are ready to receive work.
         1. Verify joint surfaces are clean and free of loose material and contaminants, including curing compounds and form-release agents.
         2. Verify joint surfaces are dry and free of frost.
         3. Ensure concrete surfaces are fully cured.
      2. Report unsatisfactory conditions in writing to the Architect;
      3. Do not proceed until unsatisfactory conditions are corrected.
   2. BACKER ROD INSTALLATION
      1. Install backer rods as recommended by manufacturer, in accordance with approved submittals, and in proper relationship with adjacent construction.
      2. Seat the backer rod with a blunt instrument or roller to depth recommended by sealant manufacturer.
      3. Avoid puncturing, stretching, folding, and over compression. Where moisture resistance is important, care should be taken to avoid puncturing the water-resistant outer surface skin.

\*\* NOTE TO SPECIFIER \*\* Paragraph below is for Soft Type Backer Rod. Delete if not required.

* + 1. Do not use with hot-applied sealants.
  1. CLEANING
     1. Upon completion, remove surplus and excess materials, rubbish, tools and equipment.
  2. PROTECTION
     1. Protect installed product from damage during construction.

END OF SECTION