SECTION 07466

INSULATED VINYL SIDING

\*\* NOTE TO SPECIFIER \*\* Royal Building Products - Siding & Trim Board; Haven Insulated vinyl siding products.  
This section is based on the products of Royal Building Products - Siding & Trim Board, which is located at:  
91 Royal Group Crescent  
Woodbridge, ON, Canada L4H 1X9  
Toll Free Tel: 800-387-2789  
Tel: 905-850-9700  
Fax: 905-850-9184  
Email: [request info (RBPCustomerCare@royalbuildingproducts.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Royal+Building+Products+-+Siding+%26+Trim+Board&coid=46961&rep=&fax=905-850-9184&message=RE:%20Spec%20Question%20(07466rbp):%20%20&mf=)  
Web: <http://www.royalbuildingproducts.com/siding/?LangType=1033>   
  
 [ [Click Here](https://www.arcat.com/arcatcos/cos46/arc46961.html) ] for additional information.  
  
Royal Building Products offers a variety of building products to complement any home including Premium Vinyl Siding, Soffit, Shutters, Mounts & Vents, Vinyl & Aluminum Columns, and Accessories, all backed by the most powerful warranties in the business. This specification includes Haven insulated siding that combines the looks of real wood and offers the energy efficiency of industry-leading insulation technology. Our graphite enhanced EPS insulation is made with Neopor® from BASF SE.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Insulated Vinyl siding.
    2. Insulated Vinyl Accessories.
  1. RELATED SECTIONS

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

* + 1. Section 06100 - Rough Carpentry: Framing and sheathing.
    2. Section 07210 - Thermal Protection.
    3. Section 07260 - Vapor Retarders.
    4. Section 07600 - Flashing and Sheet Metal.
    5. Section 07900 - Joint Protection.
  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 C 272 - Test Method for Water Absorption of Core Materials for Structural Sandwich Construction.
    2. ASTM C 303 - Standard Test Method for Dimensions and Density of Preformed Block and Board-Type Thermal Insulation.
    3. ASTM C 578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
    4. ASTM C 1363 - Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus
    5. ASTM D 635 - Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supported Plastics in a Horizontal Position.
    6. ASTM D 638 - Test Method for Tensile Properties of Plastics.
    7. ASTM D 696 - Test Method for Coefficient of Linear Expansion of Plastics.
    8. ASTM D 1929 - Test Method for Ignition Properties of Plastics.
    9. ASTM D 3679 - Specification for Rigid Poly Vinyl Chloride (PVC) Siding.
    10. ASTM D 5206 - Standard Test Method For Windload Resistance of Rigid Plastic Siding.
    11. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.
    12. ASTM E 96/E 96M - Standard Test Methods for Water Vapor Transmission of Materials
  1. SUBMITTALS
     1. Submit under provisions of Section 01300.
     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.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
    2. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Maintain rigorous production quality control standards to ensure that vinyl siding will perform as expected for its intended use. Products meet or exceed the requirements of ICC and VSI and listed by ICC International Code Council and VSI Vinyl Siding Certification Programs
     2. Installer Qualifications: Installer with not less than three years documented experience with products specified or who has passed the Vinyl Siding Institute's (VSI) Certified Installer Program.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface installation techniques and workmanship.
       1. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
       3. Reinstall mock-up area as required to produce acceptable work.
    2. Regulatory Requirements:

\*\* NOTE TO SPECIFIER \*\* Delete requirements below that do not apply to the project. Add others as required.

* + - 1. International Building Code (IBC) - TER 1301-03 - 2006, 2009 and 2012
      2. International Residential Code (IRC) - TER 1301-03 - 2006, 2009 and 2012
  1. DELIVERY, STORAGE, AND HANDLING
     1. Store products in manufacturer's unopened packaging until ready for installation.
     2. Store vinyl siding, soffits and accessories in clean, dry area, out of direct sunlight.
     3. Handle material to prevent damage. Do not allow cartons to crease.
  2. 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 absolute limits.
  3. WARRANTY
     1. Provide manufacturer's limited lifetime warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Royal Building Products - Siding & Trim Board, which is located at: 91 Royal Group Crescent; Woodbridge, ON, Canada L4H 1X9; Toll Free Tel: 800-387-2789; Tel: 905-850-9700; Fax: 905-850-9184; Email: [request info (RBPCustomerCare@royalbuildingproducts.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Royal+Building+Products+-+Siding+%26+Trim+Board&coid=46961&rep=&fax=905-850-9184&message=RE:%20Spec%20Question%20(07466rbp):%20%20&mf=); Web: <http://www.royalbuildingproducts.com/siding/?LangType=1033>

\*\* 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 01600.
  1. MATERIALS
     1. Polyvinyl Chloride Characteristics:
        1. Impact Resistance: > 60 ft-lb (ASTM D 4226
        2. Tensile Strength: > 6000 psi (ASTM D 638)
        3. Modulus of Elasticity: 365,000 psi (ASTM D 638)
        4. Coefficient of Linear Expansion: < 3.5 x 10-5 in./in degrees F (ASTM D 696)
        5. Camber: < 1/8 in. (ASTM D 3679)
        6. Heat Shrinkage: 0.00 (ASTM D 3679)
        7. Surface Distortion: No distortion at 120 degrees F (ASTM D 3679)
     2. Fire Resistance Characteristics:
        1. Average Time of Burning: < 5 sec. (ASTM D 635)
        2. Average Extent of Burning: < 10 mm (ASTM D 635)
        3. Flame Spread- PVC: < 25 (ASTM E 84)
        4. Smoke Density- PVC: 460 (ASTM E 84)
        5. Flame Spread-Foam: < 75 (ASTM E 84)
        6. Smoke Density-Foam: 90 (ASTM E 84)
        7. Ignition Properties: Self Ignition did not occur. At 797 degrees F sample began to smolder and continued until consumed (ASTM D 1929)
     3. Foam Backed Siding:
        1. Polystyrene Density: 1.0 lb./cu.ft. minimum (ASTM C 303)
        2. System R-Value: Up to 2.7 (ASTM C 1363) (R-Values vary slightly depending upon profile).
        3. Water Permeability: 5.0 perm/inch Maximum (ASTM E 96)
        4. Water Absorption for Expandable Polystyrene: < 2.75 percent by volume (ASTM C 272)
        5. Impact Resistance: < 200 in. x lb. (ASTM D 4226)
  2. INSULATED VINYL SIDING
     1. Haven Double 6 inch Traditional Horizontal Siding:
        1. Profile: 6 inch (152 mm) clapboard profile.
        2. Interlocking Profile.
        3. Panel Projection: 1-1/8 inches (28.5 mm)
        4. Panel Height: 12 inches (305 mm).
        5. Length:

\*\* NOTE TO SPECIFIER \*\* Select one of the following paragraphs for length and delete the not one not required.

* + - * 1. 12 feet 6 inches (3.81 m).
        2. 16 feet 6 inches (5.03 m).
      1. System R-Value with White EPS: 2.2.
      2. Sound Performance: STC of 16 and an OITC of 12.
      3. TXL Lamination Technology.
      4. Wind Resistance: design pressure of minus 65 psf with standard installation.
      5. Finish: Woodgrain.
      6. Color: As selected by Architect from manufacturer's standard colors.
    1. Haven Double 7 inch Horizontal Siding:
       1. Profile: 7 inch (179 mm) clapboard profile.
       2. Interlocking Profile.
       3. Panel Projection: 1-1/8 inches (28.5 mm)
       4. Panel Height: 7 inches (179 mm).
       5. Length: 12 feet 2 inches (3.71 m).
       6. System R-Value with White EPS: 2.4.
       7. Sound Performance: STC of 16 and an OITC of 12.
       8. TXL Lamination Technology.
       9. Wind Resistance: design pressure of minus 44 psf with standard installation.
       10. Finish: Woodgrain.
       11. Color: As selected by Architect from manufacturer's standard colors.
    2. Haven Double 4-1/2 inch Designer Horizontal Siding:
       1. Profile: 4-1/2 inch (114 mm) clapboard profile.
       2. Interlocking Profile.
       3. Panel Projection: 1-1/8 inches (28.5 mm)
       4. Panel Height: 9 inches (228 mm).
       5. Length: 12 feet 0 inches (3.05 m).
       6. System R-Value with White EPS: 2.7.
       7. Sound Performance: STC of 16 and an OITC of 12.
       8. TXL Lamination Technology.
       9. Wind Resistance: design pressure of minus 60 psf with standard installation.
       10. Finish: Woodgrain.
       11. Color: As selected by Architect from manufacturer's standard colors.
    3. Haven Board and Batten Vertical Siding:
       1. Profile: 10 inch (254mm) board and batten profile.
       2. Interlocking Profile.
       3. Panel Projection: 1-1/8 inches (28.5 mm)
       4. Panel Width: 20 inches (508 mm).
       5. Length: 10 feet 0 inches (3.05 m).
       6. System R-Value with White EPS: 2.1.
       7. Sound Performance: STC of 16 and an OITC of 12.
       8. TXL Lamination Technology.
       9. Wind Resistance: design pressure of minus 42 psf with standard installation.
       10. Finish: Woodgrain.
       11. Color: As selected by Architect from manufacturer's standard colors.
  1. ACCESSORlES

\*\* NOTE TO SPECIFIER \*\* See manufacturer's Product Guide for available accessories and colors

* + 1. Standard Siding Accessories: Provide inside corners, outside corners, j-channels, etc as indicated on the Drawing or as required for the project.
       1. Color: As selected by Architect from manufacturer's standard colors.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly prepared.
      2. Confirm that all critical dimensions are as specified on the drawings.
      3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Repair substrate flaws or defects before applying siding or trim.
      3. Where necessary, fur surfaces to an even plane and free from obstructions before application.
      4. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install siding and trim in accordance with the latest edition of the manufacturer's Installation Instructions.
      2. Install cellular siding, trim and accessories in accordance with best practice, with all joint members plumb and true.
      3. Securely attach siding using methods and materials recommended by siding manufacturer for wind load conditions at project site.
      4. Install siding and accessories with all joint members plumb and true.
   4. FIELD QUALITY CONTROL
      1. After installation of siding and trim, check entire surface for obvious flaws or defects.
      2. Replace and repair any problem areas.
   5. CLEANING
      1. After application of siding and trim, clean as necessary to remove all fingerprints and soiled areas.
      2. Upon completion of siding application, clean entire area, removing all scrap, packaging, and unused materials related to this work.
   6. PROTECTION
      1. Protect installed products until completion of project.
      2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION