

This master guide specification Section is intended for use when specifying plastic panelling. This section includes performance, and descriptive type specifications; edit text to avoid conflicting requirements and add trades names if proprietary specifying is required.

SECTION 06 64 00 – PLASTIC PANELLING

Part 1 General

1.1 SECTION INCLUDES

In this article, select the components or assemblies that are intended to be part of the content of this section and will not be included in other sections.

- .1 Plastic wall & ceiling panelling
- .2 Plastic wall & ceiling panelling accessories

1.2 RELATED SECTIONS

In this article, indicate those sections that inter-rely on this section. The listing below is only partial and should be edited to include those sections specific to the project that describe subjects or products that affect this section directly.

- .1 Section 03 11 20 - Permanent Concrete Forming
- .2 Section 04 00 00 - Unit Masonry
- .3 Section 05 00 00 - Metal Fabrications
- .4 Section 07 00 00 - Joint Sealants
- .5 Section 08 00 00 - Metal Doors & Windows
- .6 Section 09 00 00 - Room and Interior Finishes
- .7 Section 23 00 00 - Mechanical Specification
- .8 Section 26 00 00 - Electrical Specification

1.3 REFERENCES

Edit this article after editing the rest of this section. Only list reference standards below, that are included within the text of this section, when edited for a project specification - delete other references that do not apply.

- .1 ASTM 4216 - "Standard Specification for Rigid Polyvinyl Chloride (PVC) and Related Plastic Building Products Compounds"
- .2 USA - ASTM E84 - Surface Burning Characteristics of Building Materials

If wall requires STC rating – confirm with manufacturer for current evaluation

- .3 CFIA (Canadian Food Inspection Agency) approved.

1.4 SUBMITTALS FOR REVIEW

The following submittals are intended for review to determine eligibility, detailed installation information and final appearance for the project.

- .1 Section 01 33 00: Submission procedures.

- .2 Product Data: Provide data on panel materials [and installation requirements].
- .3 Manufacturer Information:
 - .1 Provide pertinent dimensions, materials, and arrangement of joints.
 - .2 Indicate suggested methods of installation, materials, arrangement of joints, profiles.

1.5 SUBMITTALS FOR INFORMATION

The following submittals are for information only; do not request these submittals if the information submitted will be assessed for acceptability.

- .1 Section 01 33 00: Submission procedures.

When manufacturer's written instructions for specific installation requirements are referenced in Part 3 Execution, include the following request for submittal of those instructions. Edit the Part 3 statements to avoid conflict with manufacturer's written instructions.

- .2 Installation Data: Manufacturer's special installation requirements.
- .3 Maintenance and cleaning procedures.

Include the following ONLY if specifying for a LEED project. Specify only the technical requirements necessary to achieve the credits desired for this project.

- .4 Sustainable Design:
 - .1 Section 01 35 18: LEED documentation procedures.
 - .2 Provide required LEED documentation for Product [recycled content] [regional materials] [certified wood].
 - .3 Manufacturer's Certificate: Certify that Products meet or exceed [specified requirements] [_____].

1.6 QUALITY ASSURANCE

In the following paragraph, select one or more of standards that are applicable. Include the last sentence of the following paragraph only when the costs of acquiring the specified standards are justified.

- .1 Perform Work in accordance with [CSA-S269.1] [ACI 301] [CAN/CSA-S269.3] [Province of [_____]] [State of [_____]], [Highways] [Public Works' standards].
- .2 Cost of any independent inspection required by the owner to verify compliance with the section is to be paid by the owner.

1.7 MOCK-UP

Use this article for assessing full sized erected assemblies for review of construction, coordination of work of several sections, testing, or observation of operation.

- .1 Section 01 43 00: Requirements for mock-up.
- .2 Construct mock-up minimum 1200 mm X 1200 mm (4' X 4') wall mock-up to include full wall system and details.
- .3 Locate [where directed by Consultant] [_____].
- .4 Approved mock-up [may] [may not] remain as part of the Work.

1.8 DELIVERY, STORAGE, AND PROTECTION

Utilize this article only when void forms are included.

- .1 Section 01 61 00: Transport, handle, store, and protect products.
- .2 Products shall not be restrained and/or tightly held in place for any period of time. Loosen or remove any tight packing material (2x4 lumber, strapping or similar) from packaging upon delivery to ensure no deformation occurs while in storage.
- .3 Products shall not be stored in enclosed hot spaces, to ensure no deformation occurs.
- .4 Store products level and straight – deviations for any length of storage time could be reflected in the finished wall/ceiling levels.
- .5 Store products in the shade or cover with loose tarps that provide shade - but do not restrict air flow or allow any condensation. Do not store in direct sunlight.

1.9 ENVIRONMENTAL REQUIREMENTS

- .1 Maintain ambient temperature of not less than 40 degrees F [4 degrees C] nor more than 86 degrees F [30 degrees C] from 24 hours before installation.

Specify that the temperature requirements will be maintained by the Contractor until Owner assumes responsibility for the Project.

- .2 Maintain minimum temperature of 40 degrees F [4 degrees C], until [final acceptance] [Owner occupancy] [Substantial Performance of the Work].

1.10 WARRANTY

- .1 Submit manufacturer's lifetime warranty [in accordance with General Conditions of Contract] [as specified in Section 01 00 00].
- .2 Provide written copy of the manufacturer's lifetime warranty for the materials.

1.11 EXTRA MATERIALS

- .1 Supply extra materials as specified in Section [01 78 00][01 00 00][_____].
- .2 Extra Materials: 65 ft² [6 m²] or 5%, whichever is the greater, of each Product color and width; clearly marked to identify:
 - .1 Manufacturer's name,
 - .2 Product's name,
 - .3 Product color and width.
- .3 Package products neatly in original containers, to prevent damage.

Part 2 Products

2.1 MANUFACTURER

- .1 Manufacturer of Plastic Panelling Product considered acceptable for use:
"QUICKLINER" as distributed by:
Structural Panels
4741 County Road 45 N, PO Box 129
Baltimore, Ontario, Canada, K0K 1C0

Tel: 1-905-372-0195
www.structuralpanels.ca

- .2 Substitutions: [No substitutions will be allowed]. Refer to [Instructions to Bidders] [and] Section [01 25 00][01 00 00][_____].

2.2 PLASTIC PANELLING

*This article is purposely written for Generic product specification related to Structural Panels
Edit the following descriptive specifications to identify project requirements and specific
engineered requirements.*

- .1 Plastic Panelling: to the following:
- .1 Extruded Plastic Profile: Rigid PVC, interlocking panel components, stiffened to span up to 18” without deflection detrimental to tolerances and appearance of finished surfaces.
 - .2 Color: [White], [Grey], [Beige].
 - .3 Finish: {N2/Gloss}, [_____]
 - .4 Actual Thickness: .375” (9.525 mm)
 - .5 Colour [white] [grey] [beige].
 - .6 Panel Width: [12” (304.8 mm)], [18” (482.6 mm)].
 - .7 Panel Length: To suit installation
 - .8 Product and Manufacturer’s Name: Quickliner.

2.3 PANEL ACCESSORIES

- .1 Accessories: extruded rigid PVC Trim, [_____].
- .2 Sealants: to the following:
- .1 Dow 1199 by Dow Corning
 - .2 Tremsil 600 by Tremco
 - .3 Bondaflex Sil 200GPN by Bondaflex Technologies
- .3 Fasteners: Use only corrosion-resistant (galvanized, stainless steel or aluminum) nails, screws and washers. The approved fasteners include:
- .1 Concrete - 3/16” diameter Phillips Flat Head or similar
 - .2 Stainless steel - #8 Phillips Truss Head or similar
 - .3 1/4” inside diameter washers, or pancake screws, are recommended for use with appropriate fasteners.

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Verify lines, levels and centres before proceeding.
- .3 Ensure that dimensions agree with drawings.
- .4 On receipt of product to site, check surfaces of all products for straightness and/or deformities. Contact your sales representative immediately in the event of any abnormalities.

- .5 Beginning of installation implies acceptance of existing conditions.

3.2 PREPARATION

- .1 Install furring, where necessary.
- .2 All surfaces to receive Quickliner shall be uniform and straight throughout.
- .3 Quickliner shall be supported and fastened every 16" (400mm) to 24" (600mm) maximum. Install continuous nailing strips or supports at the perimeters and around all openings to support all trims.
- .4 If the Quickliner runs parallel to ceiling joints, roof trusses or wall studs, install additional 1" x 3" (25mm x 75mm) metal or wood furring at 16" (400mm) to 24" (600mm) maximum centers.
- .5 Install furring or strapping at the location of butt joints, for support of the H-Trim.
- .6 When planning to suspend lighting fixtures, install wall fixtures or other items within the installation area of the Quickliner, adequate additional support shall be provided at each location where required, as specified by either the manufacturer of the products and/or the structural engineer acting for the purchaser.
- .7 Prior to start of installation, install all air, moisture and vapor barriers as required. These items are not provided as part of the Quick Liner system.

3.3 GENERAL INSTALLATION

- .1 Quick Liner shall only be installed at temperatures above 40°F (5°C).
- .2 All materials shall be stored at temperatures above 40°F (5°C) for 24 hours prior to installation. At temperatures below 40°F, panels may chip when cut.
- .3 The recommended maximum service temperature for Quick Liner is 122°F (50°C).
- .4 Quick Liner shall not be directly exposed to flame or radiant heat sources. Generally, all heaters, including radiant heaters shall be shielded and located more than 18" (450mm) from Quick Liner. Contact the manufacturer of any heater or radiant heater for installation details, heat shield requirements and all clearances from Quick Liner.

If specific or special items require placement, the following paragraph illustrates a more specific reference to an appropriate section. Add paragraphs as required.

- .5 When installing Quick Liner in temperatures below 8°C (48°F), insert a dime (1.35mm/0.053") between panels as additional spacing to allow for expansion during hot weather. When installing in temperatures below 5°C (40°F), insert a nickel (1.95mm/0.077") between the panels to allow space for expansion in hot weather.
- .6 Provide clearances between all panels during installation as follows:
 - .1 ¼" (6mm) clearance minimum at each end of all Quick Liner ceiling panels
 - .2 ½" (12mm) clearance minimum at top of all wall panels
 - .3 1/32" (1mm) gap minimum between panels at interlocking joints
 - .1 Recommended clearances are based on a maximum temperature fluctuation of 72°F (22°C) and lengths not greater than 16ft (4.9m).
- .7 For lengths greater than 16ft (4.9m) or if Quick Liner will be subject to greater temperature fluctuations, increased clearances and oversized holes for fasteners are

recommended. Contact your Structural Panels account manager for recommendations to suit specific conditions.

- .8 On receiving Quickliner material, check all materials received against the shipping list and notify your Structural Panels sales representative of any abnormalities.

3.4 WALL INSTALLATION GUIDELINES

- .1 Where Quick Liner is being installed on both walls and ceilings, install the wall panels first.
.2 Plan the layout of the Quickliner and trims to achieve an even spacing and to align with other adjacent work.

- .3 Determine panel layout and width of first panel so that the first and last panel in each wall section will be a minimum of 8" (200mm) wide.

- .4 Use a chalk line to establish a horizontal line across the base of the wall and a vertical line for the edge of the first panel

- .5 In wet environments (e.g. vehicle wash), begin by installing J-Trim or Base Trim along the bottom of the wall at least 1" (25mm) above top of slab or finished floor level.

- .6 Drill 1/4" (6mm) diameter drain holes in the bottom of the J-Trim at 16" (400mm) on center or as appropriate for the application of the particular project requirements.

- .7 Install Trim at the top of walls if the top of panels are not hidden behind other ceiling finish. If using Inside Corner Snap-Trim at the top of the walls, base piece should be installed before any panels.

Install Inside/Outside Corner Snap-Trim base pieces.

- .8 Install panels into J-Trim and/or adjacent to Snap-Trim base pieces.

.9

CEILING INSTALLATION GUIDELINES

3.5

Where Quickliner is being installed on both walls and ceilings, install the wall panels first.

- .1 Around the perimeter of the ceiling, use Inside Corner Snap-Trim or J-Trim.

- .2 Determine panel layout and width of first panel so that the first or last panel in each course will be a minimum of 8" (200mm) wide.

- .3 Use a chalk line to establish a straight line across the ceiling for the end of the first course. Plan the layout of H-Trim Snap to achieve an even balance or to align with adjacent work.
.4

Install into the J-Trim or adjacent to Snap-Trim base piece at one corner of the ceiling.

- .5 Always ensure that 1/8" (4mm) space is maintained for expansion at panel sides and minimum 1/4" (6mm) expansion at panel ends.

- .6 Fasten every 24" (600mm) maximum along the length of the Quickliner, positioning fasteners in the center of the slots. Do not fasten tightly. Fasten within 4" (100mm) to 6" (150mm) of the end of the panels.
.7

Install H-Trim base piece at joints leaving 1/4" (6mm) on either side for expansion and to accommodate installation of H-Trim cap piece.

- .8 For best appearance, monitor the joints to ensure that the panels are aligned and remain parallel.
.9

- .10 For the last course, cut the length of the panels to suit, leaving room for the expansion in the J-Trim or Corner Trim (1/4" (6mm) minimum) at each end and 3/8" (9.5mm) on the side.
- .11 Install the perimeter trim and, if not using Snap-trim, pull panel back 1/8" (4mm), to interlock the last joint.

3.6 CLEANING

- .1 Remove excess sealant from joints, trim.
- .2 Clean surfaces in accordance with manufacturer's printed instructions. Refer to Section [01 74 00][01 00 00][_____].

3.7 PROTECTION

- .1 Protect panels until [final acceptance] [Owner occupancy] [Substantial Performance of the Work].

END OF SECTION