

- 1) ASTM C272/C272M-12, Standard Test Methods for Water Absorption of Core Materials for Sandwich Construction

3) Canadian General Standards Board (CGSB)

- a) CGSB 71-GP-24M, Adhesive, Flexible for Bonding Cellular Polystyrene Insulation
- b) CAN/CGSB-51.32-m77, Sheathing, Membrane, Breather Type.

1.4 - System Description

Provide Fortefy Thermo semi-rigid expanded polystyrene boards installed as per FORTE’s published recommendations to meet the design/performance requirements for the project

[specify the design/performance requirements to be achieved by Fortefy Thermo rigid expanded polystyrene boards]

1.5 - Submittals

[Specifier Note: The articles below shall be edited to include relevant documents to be provided by the contractor before, during or after construction in accordance with section 01 and the conditions of contract]

1 – Manufacturer’s qualification: Submit manufacturer’s (FORTE EPS) proof of participation in a third party certification program to assure product conformance to the specified performance and physical properties in coordination with section 01 33 00 (submittal procedures) and 01 40 00 (quality requirements)

2 – Product Data: Submit manufacturer’s (FORTE EPS) documents related to the product description, installation recommendations and specifications in accordance with section 01 33 00 (submittal procedures)

3 – Samples: Submit product samples with manufacturer’s (FORTE EPS) label and specifications in accordance with section 01 33 00 (submittal procedures)

4 – Shop drawings: Submit contractor’s shop drawings in accordance with section 01 33 00 (submittal procedures) indicating the fastener type, size and the orientation of installing the insulation boards

1.6 - Quality Assurance

[Specifier Note: The articles below shall be edited to include all quality assurance documents and procedures in accordance with section 01 40 00 – Quality Requirements]

1 – Installer’s qualification: Installer shall submit records demonstrating at least *[3 years]* of experience installing similar products on projects of similar size and complexity

2 – Manufacturer’s quality assurance: Manufacturer (FORTE EPS) shall submit third party testing report and certification documents to assure manufactured products are in compliance

with *[CAN/ULC S701-11 or ASTM C578-12b]* *[specifier note: Only retain standards applicable to the project]*

1.7 - Pre-installation Meetings

[specifier Note: specify meeting requirements to comply with section 01 31 00 – Project Management and Coordination.]

Pre-installation meetings shall be conducted at least *[one week]* before commencing work under this section or any other related sections to:

- Review project requirements
- Existing site conditions
- Review FORTE’s installation recommendations
- Coordinate the sequence of work with other trades

1.8 - Delivery Storage and Handling

[specifier note: Articles below shall be edited to include specific instructions for the delivery, storage and handling of the product all in accordance with sections 01 65 00 (product delivery requirements) and 01 66 00 (product storage and handling requirements)]

1 – Review *[FORTE’s]* ordering process, lead times and delivery schedule to avoid construction delays

2 – Products to be delivered in bundles wrapped in plastic sheets complete with *[FORTE’s name]*, logo, product description, product number and applicable third party certification and listing information

3 – Comply with *[FORTE’s]* recommendations for handling products in order to avoid physical damage prior to installing the product

4 – Comply with *[FORTE’s]* recommendations for storing the product onsite prior to installation:

- a) Fortefy Thermo insulation boards shall be protected from continuous and elongated exposure to direct sunlight using a suitable material such as an opaque polyethylene film

2 – Standards: Insulation boards tested for physical properties in accordance with ASTM C578-12b and surface burning characteristics in accordance with ASTM E-84

3 – Thermal Resistance: [Specify the overall thermal resistance required for the project]

[Specifier note: The articles below shall be edited to retain the material type(s) appropriate for the project requirements]

4 – **Type 1** (CAN/ULC-S701 and CAN/ULC-S102.2): RSI 0.65 per 25mm (R-3.75 per inch)
a) Acceptable material: **Fortefy Thermo** Insulation board manufactured by FORTE EPS

5 – **Type 2** (CAN/ULC-S701 and CAN/ULC-S102.2): RSI 0.7 per 25mm (R-4.04 per inch)
a) Acceptable material: **Fortefy Thermo HD** Insulation board manufactured by FORTE EPS

6 - **Type 3** (CAN/ULC-S701 and CAN/ULC-S102.2): RSI 0.74 per 25mm (R-4.27 per inch)
a) Acceptable material: **Fortefy Thermo HDS20** Insulation board manufactured by FORTE EPS

7 - **Type I** (ASTM C578-12b and ASTM E-84): RSI 0.63 per 25mm (R-3.6 per inch)
a) Acceptable material: **Fortefy Thermo** Insulation board manufactured by FORTE EPS

8 – **Type II** (ASTM C578-12b and ASTM E-84): RSI 0.70 per 25mm (R-4.0per inch)
a) Acceptable material: **Fortefy Thermo HD** Insulation board manufactured by FORTE EPS

9 – Material Thickness: [----- mm][----- inch][as indicated]

10 – Edge finish: [Square] [Shiplap]

2.4 - Accessories

1) Adhesives

[Specifier note: Adhesives must be recommended by the manufacturer as being compatible for use with expanded polystyrene foam insulation]

Adhesive Type:[Specify adhesive name, type and manufacturer]

Standard: Adhesive is tested and approved to CGSB 71-GP-24M, Type [-----], class [-----], low VOC, suitable for use with expanded polystyrene foam insulation]

2) Fasteners

[Specifier note: the articles below shall be edited to retain the suitable method of fastening depending on the specific application for the project]

a) Fastening to concrete/masonry/steel studs above or below grade: Use self tapping screws with minimum washer diameter of 25 mm (1 inch). Screws shall be long enough to penetrate minimum 25mm into the concrete/masonry/steel studs

a) Fastening to wood stud framing: Use screws or spiral nails or screws with minimum 25 mm diameter plastic washers. Nails or screws shall be sufficient in length to penetrate minimum of 25 mm (1 inch) into the wood stud framing.

3. Execution

3.1 - Manufacturer's Instructions

Comply with FORTE's instructions and recommendations for installing Fortefy Thermo insulation boards included in this specification guides as well as other technical brochures and bulletins.

3.2 - Examination

[Specifier note: The articles below shall be edited to specify any actions required to determine on site are at acceptable prior to installing Fortefy Thermo insulation boards]

- 1) Inspect all substrates to which Fortefy Thermo insulation boards will be applied and ensure the same is clean with no dust on surfaces, smooth, dry, free of snow or ice and no protrusions.
- 2) Report to project consultant in writing should site conditions prove not suitable for EPS installation as mentioned in article 3.2.1

3.3 - Installation

[Specifier note: The articles below shall be edited to retain only those pertaining to the project application]

A) General

- 1) Install Fortefy Thermo insulation boards with appropriate thickness to achieve the project required R-values as indicated in drawings.

