
PART 1. GENERAL

SPEC NOTE: This section specifies breathable construction paper used behind stucco, stone and other types of exterior wall cladding where a separating drainage gap is desired between the structural wall surface and the external finish.

Edit this specification to suit project requirements.

LEED Credits: Contribution towards potential LEED credits may be available in this section:

- .1 Some products have recycled content which will contribute to MR 4.1(7.5%) and 4.2(15%).***
- .2 Some products are manufactured regionally which may contribute to MR 5.1(10%) and MR 5.2(20%).***

1.1 SUMMARY

- .1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.
- .2 Refer to other Divisions of these specifications to determine the type and extent of work therein effecting the work of this trade, whether or not such work is specifically mentioned in the Section.

1.2 DESCRIPTION

- .1 Work of this Section consists of furnishing all labour, materials, equipment and services necessary to complete the work indicated herein.

1.3 RELATED WORK

SPEC NOTE: Select applicable related sections.

SPEC NOTE: Limit section listings to only those sections containing specific information that would directly affect the work of this section.

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|-----|------------------------------|------------------|
| .1 | Submittal Procedures: | Section 01 33 00 |
| .2 | LEED Requirements | Section 01 35 18 |
| .3 | Environmental Procedures | Section 01 35 20 |
| .4 | Waste Management | Section 01 74 19 |
| .5 | Masonry: | Section 04 00 00 |
| .6 | Stone Assemblies: | Section 04 40 00 |
| .7 | Rough Carpentry: | Section 06 10 00 |
| .8 | Vapour Retarders: | Section 07 26 00 |
| .9 | Air Barriers: | Section 07 27 00 |
| .10 | Wall Panels: | Section 07 42 00 |
| .11 | Wood Siding: | Section 07 46 23 |
| .12 | Plastic Siding: (vinyl) | Section 07 46 33 |
| .13 | Aluminum Siding: | Section 07 46 16 |
| .14 | Mineral Fibre Cement Siding: | Section 07 46 46 |
| .15 | Flashing and Sheet Metal: | Section 07 60 00 |
| .16 | Stucco: | Section 09 24 23 |

1.4 REFERENCES

- .1 Canada Green Building Council (CaGBC) LEED Green Building Rating System.
- .2 Canadian General Standards Board (CGSB) CAN 2-51.32 Sheathing, Membrane, Breather Type
- .3 Federal Specification UU-B-790-A Building Paper, Vegetable Fiber: (Kraft, Waterproofed, Water Repellent and Fire Resistant)
- .4 ASTM E96; Test Method for Water Vapor Transmission of Materials.
- .5 ASTM D779-03 Standard Test Method for Water Resistance of Paper, Paperboard, and Other Sheet Materials by the Dry Indicator Method (Note: withdrawn)
- .6 Canadian Construction Materials Centre (CCMC) Evaluation Listing 11479-L.
- .7 Applicable local, municipal, provincial and national building codes.

1.5 QUALITY ASSURANCE

- .1 Installer shall be willing to be trained or have experience with installation of Hal-Tex Cor-Ply assemblies under similar conditions.
- .2 Installation shall be in accordance with the Project Authority's instructions and in conjunction with Hal Industries installation guidelines and recommendations.

1.6 SUBMITTALS

- .1 Samples
 - .1 Submit samples in accordance with Section (01 33 00).
 - .2 Submit 300 mm x 300 mm (12" x 12") sample upon request by Consultant (Engineer).
- .2 Product Data
 - .1 Product Literature: Manufacturer's product data sheets, specifications, performance data, physical properties and installation instructions.
- .3 Submit (___) copies of Workplace Hazardous Materials Information System (WHMIS) Material Safety Data Sheets (MSDS).

SPEC NOTE: Delete submittal item if project is not to attain LEED certification or if Credit MR 4.1 and/or 4.2 are not being sought.

- .4 LEED Submittals: submit LEED submittal forms for Credits MR 4.1 and/or MR 4.2 in accordance with Section 01 35 18 LEED Requirements and the following
 - .1 Recycled Content: (provide listing of recycled content products used, including details of required percentages or recycled content materials and products, showing their costs and percentages of (post-consumer) (and) (post-industrial) content, and total cost of materials for project).

SPEC NOTE: Delete LEED submittal item if project is not to attain LEED certification or if Credit MR 5.1 and/or 5.2 are not being sought.

- .5 LEED Submittals: submit LEED submittal forms for Credits MR 5.1 and/or MR 5.2 in accordance with Section 01 35 18 LEED Requirements and the following:
 - .1 Regional Materials: provide evidence that project incorporates required percentage (10) (20) % of regional materials/products, showing their cost, distance from project to furthest site of extraction or manufacture, and total cost of materials for project.

SPEC NOTE: Use the following paragraph to specify mock-up to include penetrations or transitions where continuity of installation may require greater attention.

1.7 MOCK-UPS

- .1 Submit mock-ups in accordance with Section 01 45 00 - Quality Control.
- .2 Construct mock-up of Hal-Tex Cor-Ply installation including one lap joint, one inside corner and at one wall penetration. Mock-up may be part of finished work.
- .3 Mock-up will be used to judge workmanship, substrate preparation, and material application.
- .4 Locate (where directed) (where indicated).
- .5 Allow (___) hours for inspection of mock-up by (Consultant) (Engineer) before proceeding with Hal-Tex Cor-Ply work.
- .6 When accepted, mock-up will demonstrate minimum standard of quality required for this work. (Approved mock-up may (not) remain as part of finished work.) (Remove mock-up and dispose of materials when no longer required and when directed by (Consultant) (Engineer).

1.8 DELIVERY, STORAGE AND HANDLING

- .1 Deliver Hal-Tex Cor-Ply to site in manufacturer's original, labelled and protective packaging. Labels to be intact and legible; identifying manufacturer and contents; uniquely identified for each intended location.
- .2 Store products off ground, under cover, protected from elements and construction activities. Schedule delivery to prevent delays, but minimize on-site storage.
- .3 Waste Management and Disposal: Separate waste materials for (reuse) (and) (recycling) in accordance with Section (01 74 21 - Construction/Demolition Waste Management and Disposal).

PART 2. - PRODUCTS

2.1 MATERIALS

- .1 Manufacturer:
 - Hal Industries Inc.
 - 9681 - 187th Street
 - Surrey, BC V4N 3N3
 - Tel: 604-888-0777
 - Fax: 604-888-1656

- .2 Breather Membrane
 - .1 Two-ply, breather-type, asphalt-saturated building paper with one corrugated ply laminated to one smooth ply. Corrugations shall be 2.5 to 3.5 mm in depth, and provide vertical channels for moisture drainage and air movement behind the exterior cladding
- .3 Technical Data
 - .1 Width: 1 metre (40") , 914 mm (36") coverage.
 - .2 Thickness: 2.5 mm 'B' flute; (option) 3.5 mm "C" flute.
 - .3 Sheet Size & Coverage: 1 metre x 10 metre roll = 36" x 33 ft. (100 sq. ft. coverage) **(option)** 1 metre x 2 metre = 36" x 80" (20 sq.ft coverage)
 - .4 Water Vapour Permeance: > 3.0 metric perms (264 ng/pa.sec) (ASTME96)
 - .5 Compliance: CAN2-51.32 M77, CCMC Listing # 11479-L
 - .6 Approved product: Hal-Tex Cor-Ply by HAL Industries Inc.
- .4 Building/sheathing paper:
 - .1 Asphalt saturated kraft paper permitting passage of water vapour; conforming to U.S. Standard UUB-770A for 30 minute water resistance, to CAN2-51.32M and to U.S. Standard UUB-790A, while permitting passage of water vapour.
 - .2 Approved product: Hal-tex 30 Minute by HAL Industries Inc.
- .5 Staples: corrosion-resistant alloy or plated, lengths required to penetrate plywood and gypsum sheathing for secure attachment of Hal-Tex Cor-Ply.
- .6 Self adhesive tape: 1.0 mm (40 mil) self-adhering membrane consisting of an SBS rubberized asphalt compound integrally laminated to an engineered thermoplastic film. Lengths x widths as required.

(option)

Contractor's Sheathing Tape consisting of a biaxially oriented polypropylene backing and coated with a clear acrylic pressure-sensitive adhesive; OR tape consisting of a biaxially oriented polypropylene backing and coated with a clear acrylic pressure-sensitive adhesive.

SPEC NOTE: Ensure self adhesive tape is compatible with self adhesive vapour barriers used around openings in exterior walls.

PART 3. - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 PREPARATION

- .1 Verify substrate conditions are acceptable to Project Authority before starting installation of Hal-Tex Cor-Ply.
- .2 Hal-Tex Cor-Ply shall be installed over a minimum one layer of 30 minute building paper or other acceptable sheathing membrane installed to meet local building codes.
- .3 Mark the wall 914 mm (36") above the lowest point where moisture protection is required, 50 mm (2") below the bottom of the lowest wall plate or sheathing, or at the drip flashing if a drip flashing is used.

SPEC NOTE: Specify applicable fastening methods for other substrates i.e. metal studs or concrete block.

3.3 INSTALLATION

- .1 Bug Screen: Project Authority shall determine if bug or ant screen is required, install a bug screen to cover Hal-Tex Cor-Ply corrugations at wall base.
- .2 Bottom Sheet:
 - .1 Install Hal-Tex Cor-Ply with corrugations facing inwards by rolling it out and stapling to the wall with a hand stapler.
 - .2 Top edge of the Hal-Tex Cor-Ply sheet shall coincide with the 914 mm (36") mark on the wall. Trim off the bottom flap protruding past the lowest point of the cladding. Leave corrugations at the wall bottom open to allow drainage and air entry.
- .3 Main Wall Area:
 - .1 Pre-mark the wall at 927 mm (36 1/2") above the top edge of the lower sheet.
 - .2 Staple the second sheet above bottom sheet. Ensure the flap on the upper sheet overlaps the lower sheet. Allow approximately 12 mm (1/2") gap between corrugations.
 - .3 Tape all vertical joints with a self adhesive tape or cover with a 300 mm (12 " wide) strip of building paper.
- .4 Windows and Doors:
 - .1 Ensure windows and doors are sealed with caulking or tape to the window flashing membrane and building paper as per Project Authority's design.
 - .2 Install a metal drip flashing above each window and door as per standard industry practice.
 - .3 Terminate Hal-Tex Cor-Ply approximately 6 mm (1/4") away from each window side flange and bottom flange as per Project Authority's design.
 - .4 Install Hal-Tex Cor-Ply over the top window flashing but do not block corrugations in order to release any moisture which may enter the wall above these points.

.5 Mid Wall Flashings:

- .1 Where required by Project Authority provide a horizontal drip flashing at each floor level to remove any accumulated moisture. Position upper leg of flashing under building paper and Hal-Tex Cor-Ply. Leave corrugated edges below and above drip flashing open to permit moisture release.

3.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19 - Waste Management and Disposal.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, steel strapping, plastic, polystyrene, corrugated cardboard packaging material in appropriate on site bins for recycling. (in accordance with Waste Management Plan.)
- .4 Ensure emptied containers are sealed and stored safely.
- .5 Divert waste materials where practical from landfill to recycling facility.

END OF SECTION 07 25 13