Section 9.27. Cladding

9.27.1. Application

9.27.1.1. General

1) Where lumber, wood shingles, shakes, fibre-cement shingles, planks and sheets, plywood, OSB, waferboard, hardboard, vinyl, aluminum or steel, including trim and soffits, are installed as cladding on wood-frame walls exposed to precipitation, the cladding assembly shall comply with

a) Subsections 9.27.2. to 9.27.12., or

b) Part 5.

2) Where stucco is installed as cladding on wood-frame or masonry walls exposed to precipitation, the cladding assembly shall comply with

a) Subsections 9.27.2. to 9.27.5., and Section 9.28., or

b) Part 5.

3) Where masonry serves as cladding on wood-frame or masonry walls exposed to precipitation, the cladding assembly shall comply with

a) Subsections 9.27.2. to 9.27.4., and Section 9.20., or

b) Part 5.

4) Where asphalt shingles are installed as cladding on wood-frame walls exposed to precipitation, the cladding assembly shall comply with

a) Subsections 9.26.7. and 9.27.2. to 9.27.4., or

b) Part 5.

5) Where an exterior insulation finish system is installed as cladding on wood-frame, masonry, cold-formed steel stud or cast-in-place concrete walls exposed to precipitation, the cladding assembly shall comply with

a) Subsections 9.25.5., 9.27.2. to 9.27.4., and 9.27.13., or

b) Part 5.

(See Note A-9.27.1.1.(5).)

6) Where cladding materials other than those described in Sentences (1) to (5) are installed, or where the cladding materials described in Sentences (1) to (5) are installed on substrates other than those identified in Sentences (1) to (5), the materials and installation shall comply with Part 5.

9.27.2. Required Protection from Precipitation

(See Note A-9.27.2.)

9.27.2.1. Minimizing and Preventing Ingress and Damage

1) Except where exterior walls are protected from precipitation or where it can be shown that precipitation ingress will not adversely affect occupant health or safety, exterior walls shall be designed and constructed to

a) minimize the ingress of precipitation into the assembly, and

b) prevent the ingress of precipitation into interior space.

(See Note A-9.27.2.1.(1).)

2) Except where exterior walls are protected from specific mechanisms of deterioration, such as mechanical impact and ultraviolet radiation, exterior walls shall be designed and constructed to minimize the likelihood of their required performance being reduced to an unacceptable level as a result of those mechanisms.

9.27.2.2. Minimum Protection from Precipitation Ingress

(See Note A-9.27.2.2.)

1) Except as provided in Sentence (2), a cladding assembly is deemed to have a capillary break between the cladding and the backing assembly, where

a) there is a drained and vented air space not less than 9.5 mm deep behind the cladding, over the full height and width of the wall (See also Article 9.27.5.3.),

b) an open drainage material, not less than 9.5 mm thick and with a cross-sectional area that is not less than 80% open, is installed between the cladding and the backing, over the full height and width of the wall,

c) the cladding's components are hollow-backed metal or vinyl and are the cladding is composed of non-insulating type, hollow backed aluminum or vinyl which is horizontally oriented and loosely fastened to the backing substrate,

d) the wall is a masonry *cavity wall* or the cladding is masonry veneer constructed according to Section 9.20., or

e) the cladding conforms to Subsection 9.27.13.

2) The drained and vented air space, and drainage material described in Sentence (1) may be interrupted by

a) penetrations for windows, doors and services,

b) flashing,

c) nominally vertical furring or strapping, provided the furring or strapping does not make up more than 20% of the drained and vented air space, and

d) insect screen, provided the screen allows for drainage and venting of the airspace.

3) Where a construction projects over the top of the drained and vented air space described in Clause (1)(a) or over the drainage material described in Clause (1)(b), the air space or drainage material shall not be contiguous with concealed spaces in the projecting construction.

4) Exterior walls exposed to precipitation shall be protected against precipitation ingress by an exterior cladding assembly consisting of a first plane of protection and a second plane of protection, where such walls enclose spaces of *residential occupancy* or spaces that directly serve spaces of *residential occupancy*.

5) Except as provided in Sentence (6), exterior walls exposed to precipitation shall be protected against precipitation ingress by an exterior cladding assembly consisting of a first plane of protection and a second plane of protection incorporating a capillary break, where

a) the number of degree-days is less than 3 400 and the moisture index is greater than 0.90, or

b) the number of degree-days is 3 400 or more, and the moisture index is greater than 1.00.

(See Sentence 1.1.3.1.(1) and Appendix C for information on the moisture index.)

6) In exterior walls described in Sentence (5), the first and second planes of protection need not incorporate a capillary break, where

a) it can be shown that omitting the capillary break will not adversely affect the performance of the *building* assemblies,

b) the *building* is an accessory *building*, or

c) the wall

i) is constructed of non-moisture-sensitive materials, and intersecting or supported floors are also constructed of non-moisture-sensitive materials, or

ii) is constructed as a mass wall of sufficient thickness to minimize the transfer of moisture to the interior.

9.27.2.3. First and Second Planes of Protection

1) Where walls required to provide protection from precipitation comprise cladding assemblies with first and second planes of protection,

a) the first plane of protection shall

i) consist of cladding with appropriate trim, accessory pieces and fasteners, and

ii) be designed and constructed to minimize the passage of rain and snow into the wall by minimizing holes and managing precipitation ingress caused by the kinetic energy of raindrops, surface tension, capillarity, gravity, and air pressure differences (See Subsection 9.27.4.),

b) the second plane of protection shall be designed and constructed to (See Subsection 9.27.3.)

i) intercept all rain and snow that gets past the first plane of protection, and

ii) effectively dissipate any rain or snow to the exterior, and

c) the protection provided by the first and second planes of protection shall be maintained

i) at wall penetrations created by the installation of components and services such as windows, doors, ventilation ducts, piping, wiring and electrical outlets, and

ii) at the interface with other wall assemblies.

9.27.2.4. Protection of Cladding from Moisture

1) A clearance of not less than 200 mm shall be provided between finished ground and cladding that is adversely affected by moisture, such as untreated wood, plywood, OSB, waferboard and hardboard.

2) A clearance of not less than 50 mm shall be provided between a roof surface and cladding that is adversely affected by moisture, such as untreated wood, plywood, OSB, waferboard and hardboard.

9.27.3. Second Plane of Protection

9.27.3.1. Elements of the Second Plane of Protection

(See Note A-9.27.3.1.)

1) The second plane of protection shall consist of a drainage plane having an appropriate inner boundary and flashing to dissipate rainwater to the exterior.

2) Except for cladding systems conforming to Subsection 9.27.13., the inner boundary of the drainage plane shall comply with Articles 9.27.3.2. to 9.27.3.6.

3) The protection provided by the second plane of protection shall be maintained

a) at wall penetrations created by the installation of components and services such as windows, doors, ventilation ducts, piping, wiring and electrical outlets, and

b) at the interface with other wall assemblies.

4) Flashing material and its installation shall comply with Articles 9.27.3.7. and 9.27.3.8.

9.27.3.2. Sheathing Membrane Material Standard

1) Sheathing membranes shall conform to the performance requirements of CAN/CGSB-51.32-M, "Sheathing, Membrane, Breather Type."

9.27.3.3. Required Sheathing Membrane and Installation

1) Except as provided in Articles 9.27.3.4. to 9.27.3.6., at least one layer of sheathing membrane shall be applied beneath cladding.

2) Sheathing membrane required in Sentence (1) shall be applied so that joints are lapped not less than 100 mm.

3) Where sheathing membrane required in Sentence (1) is applied horizontally, the upper sheets shall overlap the lower sheets.

9.27.3.4. Insulating Sheathing in lieu of Sheathing Membrane

1) Where non-wood-based rigid exterior insulating sheathing, or exterior insulating sheathing with an integral sheathing membrane is installed, a separate sheathing membrane is not required.

2) Where insulating sheathing is installed as provided in Sentence (1),

a) sheathing panels subject to moisture deterioration shall be sealed at all joints, and

b) the joints of sheathing panels not subject to moisture deterioration shall be

i) sealed at all joints, or

ii) lapped or tongue and groove, and detailed to ensure drainage of water to the exterior.

(See Note A-9.27.3.4.(2).)

9.27.3.5. Sheathing Membranes in lieu of Sheathing

1) Except as provided in Article 9.27.3.6., where no sheathing is used, at least 2 layers of sheathing membrane shall be applied beneath the cladding. (See Article 9.23.17.1. and Note A-9.27.3.5.(1).)

2) All joints in the sheathing membrane required in Sentence (1) shall occur over framing, and the membrane shall be fastened to the framing with roofing nails or staples spaced not more than 150 mm along the edges of the outer layer of sheathing membrane.

3) Wall sheathing is permitted to be used in lieu of one layer of sheathing membrane required in Sentence (1), and its thickness need not conform to Table 9.23.17.2.-A.

9.27.3.6. Face Sealed Cladding

(See Note A-9.27.3.6.)

1) Sheathing membrane is permitted to be omitted beneath cladding when the joints in the cladding are formed to effectively prevent the passage of wind and rain in conformance with Sentences (2) or (3), as applicable.

2) Cladding consisting of sheets of plywood, hardboard, OSB, waferboard or fibre cement is considered to meet the requirements of Sentence (1), provided the cladding is applied so that

a) all edges are directly supported by framing,

b) the vertical joints between adjacent sheets are sealed and

   i) covered with battens,

   ii) shiplapped, or

   iii) otherwise matched to provide weathertight joints, and

c) the horizontal joints between adjacent sheets are sealed and

   i) shiplapped, or

   ii) otherwise matched to provide weathertight joints.

3) Metal siding consisting of sheets of metal is considered to meet the requirements of Sentence (1) where the joints between sheets are of the locked-seam type.

9.27.3.7. Flashing Materials

1) Flashing shall consist of not less than

a) 1.73 mm thick sheet lead,

b) 0.33 mm thick galvanized steel,

c) 0.46 mm thick copper,

d) 0.46 mm thick zinc,

e) 0.48 mm thick aluminum, or

f) 1.02 mm thick vinyl.

9.27.3.8. Flashing Installation

1) Except as provided in Sentence (2), flashing shall be installed at

a) every horizontal junction between cladding elements,

b) every horizontal offset in the cladding, and

c) every horizontal line where the cladding substrates change and where

   i) the substrates differ sufficiently for stresses to be concentrated along that line, or

   ii) the installation of the cladding on the lower substrate may compromise the drainage of moisture from behind the cladding above.

(See Note A-9.27.3.8.(1).)

2) Flashing need not be installed as described in Sentence (1)

a) where the upper cladding elements overlap the lower cladding elements by not less than 25 mm,

b) where

   i) the cladding above and below the joint is installed outboard of a drained and vented air space (See Clause 9.27.2.2.(1)(a)), and

   ii) the horizontal detail is constructed so as to minimize the ingress of precipitation into the air space, or

c) at horizontal construction joints in stucco, where

   i) the joint is finished with an expansion-contraction strip, and

   ii) the cladding is installed outboard of a drained and vented air space (See Clause 9.27.2.2.(1)(a)).

3) Flashing shall be installed over exterior wall openings where the vertical distance from the bottom of the eave to the top of the trim is more than one-quarter of the horizontal overhang of the eave. (See Note A-9.27.3.8.(3).)

4) Flashing described in Sentences (1) and (3) shall

a) extend not less than 50 mm upward inboard of the sheathing membrane or sheathing installed in lieu of the sheathing membrane (See Article 9.27.3.4.),

b) have a slope of not less than 6% toward the exterior after the expected shrinkage of the *building* frame,

c) terminate at each end with an end-dam

i) with a height in millimetres not less than 25 mm or 1/10 the value of the 1-in-5 driving rain wind pressure in Pa, and

ii) at the height defined in Subclause (c)(i), extending to the face of the adjacent cladding,

d) lap not less than 10 mm vertically over the *building* element below, and

e) terminate in a drip offset not less than 5 mm outward from the outer face of the *building* element below.

(See Note A-9.27.3.8.(4).)

5) Where the sills of windows and doors installed in exterior walls are not self-flashing, flashing shall be installed between the underside of the window or door and the wall construction below. (See Note A-9.27.3.8.(5).)

9.27.4. Sealants

9.27.4.1. Required Sealants

1) Sealant shall be provided where required to prevent the entry of water into the structure.

2) Sealant shall be provided between masonry, siding or stucco and the adjacent door and window frames or trim, including sills, unless such locations are completely protected from the entry of rain.

3) Sealant shall be provided at vertical joints between different cladding materials unless the joint is suitably lapped or flashed to prevent the entry of rain. (See Articles 9.7.6.2., 9.20.13.12. and 9.28.1.5.)

9.27.4.2. Materials

1) Sealants shall be

a) a non-hardening type suitable for exterior use,

b) selected for their ability to resist the effects of weathering, and

c) compatible with and adhere to the substrate to which they are applied.

(See Note A-9.27.4.2.(1).)

2) Sealants shall conform to

a) ASTM C 834, "Latex Sealants,"

b) ASTM C 920, "Elastomeric Joint Sealants,"

c) ASTM C 1184, "Structural Silicone Sealants," or

d) ASTM C 1311, "Solvent Release Sealants."

3) Backer rod shall conform to ASTM C 1330, "Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants." (See Note A-9.27.4.2.(1).)

9.27.5. Attachment of Cladding

9.27.5.1. Attachment

1) Except as permitted by Sentences (2) to (6), cladding shall be fastened to the framing members or furring members, or to blocking between the framing members.

2) Vertical lumber and stucco lath or reinforcing are permitted to be attached to sheathing only where the sheathing consists of not less than

a) 14.3 mm lumber,

b) 12.5 mm plywood, or

c) 12.5 mm OSB or waferboard.

3) Vertically applied metal siding and wood shingles and shakes are permitted to be attached to the sheathing only where the sheathing consists of not less than

a) 14.3 mm lumber,

b) 7.5 mm plywood, or

c) 7.5 mm OSB or waferboard.

4) Where wood shingles or shakes are applied to sheathing which is not suitable for attaching the shingles or shakes, the shingles or shakes are permitted to be attached to a wood lath not less than 38 mm by 9.5 mm thick securely nailed to the framing and applied as described in Article 9.27.7.5.

5) **Reserved**.

6) **Reserved**.

9.27.5.2. Blocking

1) Blocking for the attachment of cladding shall be not less than 38 mm by 38 mm lumber securely nailed to the framing and spaced not more than 600 mm o.c.

9.27.5.3. Furring

1) Except as permitted in Sentences 9.27.5.1.(4) and (5), furring for the attachment of cladding shall be not less than 19 mm by 38 mm lumber when applied over sheathing.

2) When applied without sheathing, furring referred to in Sentence (1) shall be not less than

a) 19 mm by 64 mm lumber on supports spaced not more than 400 mm o.c., or

b) 19 mm by 89 mm lumber on supports spaced not more than 600 mm o.c.

3) Furring referred to in Sentence (1) shall be

a) securely fastened to the framing, and

b) spaced not more than 600 mm o.c.

9.27.5.4. Size and Spacing of Fasteners

1) Nail or staple size and spacing for the attachment of cladding and trim shall conform to Table 9.27.5.4.

Table 9.27.5.4.
Attachment of Cladding
Forming Part of Sentence 9.27.5.4.(1)

Type of Cladding	Minimum Nail or Staple Length, mm	Minimum Number of Nails or Staples	Maximum Nail or Staple Spacing, mm o.c.
Wood trim	51	–	600
Lumber siding or horizontal siding made from sheet material	51	–	600
Metal cladding	38	–	600 (nailed to framing)
			400 (nailed to sheathing only)
Wood shakes			
up to 200 mm in width	51	2	–
over 200 mm in width	51	3	–
Wood shingles			
200 mm in width	32	2	–
over 200 mm in width	32	3	–
Panel or sheet type cladding			
up to 7 mm thick	38	–	150 (along edges)
more than 7 mm thick	51	–	300 (along intermediate supports)

9.27.5.5. Fastener Materials

1) Nails or staples for the attachment of cladding and wood trim shall be corrosion-resistant and shall be compatible with the cladding material.

9.27.5.6. Expansion and Contraction

1) Fasteners for metal or vinyl cladding shall be positioned to permit expansion and contraction of the cladding.

9.27.5.7. Penetration of Fasteners

1) Fasteners for shakes and shingles shall penetrate through the nail-holding base or not less than 19 mm into the framing.

2) Fasteners for cladding other than that described in Sentence (1) shall penetrate through the nail-holding base or not less than 25 mm into the framing.

9.27.6. Lumber Siding

9.27.6.1. Materials

1) Lumber siding shall be sound, free of knot holes, loose knots, through checks or splits.

9.27.6.2. Thickness and Width

1) Drop, rustic, novelty, lapped board and vertical wood siding shall be not less than 14.3 mm thick and not more than 286 mm wide.

2) Bevel siding shall be

a) not less than 5 mm thick at the top, and

b) not less than

i) 12 mm thick at the butt for siding 184 mm or less in width, and

ii) 14.3 mm thick at the butt for siding wider than 184 mm.

3) Bevel siding shall be not more than 286 mm wide.

9.27.6.3. Joints

1) Lumber siding shall prevent water from entering at the joints by the use of lapped or matched joints or by vertical wood battens.

2) Siding shall overlap not less than 1 mm per 16 mm width of lumber, but not less than

a) 9.5 mm for matched siding,

b) 25 mm for lapped bevel siding, or

c) 12 mm for vertical battens.

9.27.7. Wood Shingles and Shakes

9.27.7.1. Materials

1) Shingles and shakes shall conform to

a) CSA O118.1, "Western Red Cedar Shakes and Shingles," or

b) CSA O118.2, "Eastern White Cedar Shingles."

2) Western cedar shakes shall be not less than No. 1 or Handsplit grade, and western cedar shingles not less than No. 2 grade, except that No. 3 grade may be used for undercoursing.

3) Eastern white cedar shingles shall be at least B (clear) grade, except that C grade may be used for the lower course of double course applications.

9.27.7.2. Width

1) Shingles and shakes shall be not less than 65 mm or more than 350 mm wide.

9.27.7.3. Fasteners

1) Shingles or shakes shall be fastened with nails or staples located approximately 20 mm from each edge and not less than 25 mm above the exposure line for single-course applications, or approximately 50 mm above the butt for double-course applications.

9.27.7.4. Offsetting of Joints

1) In single-course application, joints in succeeding courses shall be offset not less than 40 mm so that joints in any 2 of 3 consecutive courses are staggered.

2) In double-course application, joints in the outer course shall be offset from joints in the under-course by not less than 40 mm, and joints in succeeding courses shall be offset not less than 40 mm.

9.27.7.5. Fastening to Lath

1) When lath is used with double-course application (See Sentence 9.27.5.1.(4)), it shall be spaced according to the exposure and securely fastened to the framing.

2) The butts of the under-course of the application referred to in Sentence (1) shall rest on the top edge of the lath.

3) The outer course of the application referred to in Sentence (1) shall be fastened to the lath with nails of sufficient length to penetrate through the lath.

4) The butts of the shingles or shakes shall be so located that they project not less than 12 mm below the bottom edge of the lath referred to in Sentence (1).

5) If wood lath is not used, the butts of the under-course shingles or shakes of the application referred to in Sentence (1) shall be located 12 mm above the butts of the outer course.

9.27.7.6. Exposure and Thickness

1) The exposure and butt thickness of shingles and shakes shall conform to Table 9.27.7.6.

Table 9.27.7.6.
Exposure and Thickness of Wood Shingles and Shakes
Forming Part of Sentence 9.27.7.6.(1)

Shake or Shingle Length, mm	Maximum Exposure, mm		Minimum Butt Thickness, mm
	Single Coursing	Double Coursing	
400	190	305	10
450	216	356	11
600	292	406	13

9.27.8. Plywood

9.27.8.1. Material Standards

1) Plywood cladding shall be exterior type conforming to

a) ANSI/HPVA HP-1, “Hardwood and Decorative Plywood,”

b) CSA O121, “Douglas Fir Plywood,”

c) CSA O151, “Canadian Softwood Plywood,” or

d) CSA O153, “Poplar Plywood.”

9.27.8.2. Thickness

1) Plywood cladding shall be not less than 6 mm thick when applied directly to sheathing.

2) When applied directly to framing or over furring strips, plywood cladding thickness shall conform to Table 9.27.8.2.

Table 9.27.8.2.
Minimum Plywood Cladding Thickness
Forming Part of Sentence 9.27.8.2.(2)

Spacing of Supports, mm	Minimum Thickness, mm	
	Face Grain Parallel to Supports	Face Grain Right Angles to Supports
400	8	6
600	11	8

3) The thickness of grooved or textured plywood cladding shall be measured at the point of least thickness.

9.27.8.3. Edge Treatment

1) The edges of plywood cladding shall be treated with a suitable paint or sealer.

9.27.8.4. Panel Cladding

1) Plywood applied in panels shall have all edges supported.

2) Not less than a 2 mm gap shall be provided between panels referred to in Sentence (1).

3) Vertical joints in cladding referred to in Sentence (1) shall be protected with batten strips or sealant when the plywood joints are not matched.

4) Horizontal joints in cladding referred to in Sentence (1) shall be lapped not less than 25 mm or shall be suitably flashed.

9.27.8.5. Lapped Strip Siding

1) Plywood applied in horizontal lapped strips shall have not less than a 2 mm gap provided at the butted ends, which shall be caulked.

2) The horizontal joints of siding described in Sentence (1) shall be lapped not less than 25 mm.

3) Wedges shall be inserted under all vertical butt joints and at all corners when horizontal lapped plywood is applied without sheathing.

9.27.9. Hardboard

9.27.9.1. Material Standards

1) Factory-finished hardboard cladding shall conform to CAN/CGSB-11.5-M, "Hardboard, Precoated, Factory Finished, for Exterior Cladding."

2) Hardboard cladding that is not factory finished shall conform to Types 1, 2 or 5 in CAN/CGSB-11.3-M, "Hardboard."

9.27.9.2. Thickness

1) Type 1 or 2 hardboard cladding shall be not less than

a) 6 mm thick when applied over sheathing that provides continuous support, and

b) 7.5 mm thick when applied over furring or framing members not more than 400 mm o.c.

2) Type 5 hardboard cladding shall be not less than 9 mm thick when applied over sheathing that provides continuous support or over furring or framing members spaced not more than 400 mm o.c.

3) Where hardboard cladding is grooved, the grooves shall not extend more than 1.5 mm into the minimum required thickness. (See Note A-9.27.9.2.(3).)

9.27.9.3. Panel Cladding

1) Hardboard cladding applied in panels shall have all edges supported with not less than a 5 mm gap provided between sheets.

2) Vertical joints in cladding described in Sentence (1) shall be protected with batten strips or sealant when the joints are not matched.

3) Horizontal joints in cladding described in Sentence (1) shall be lapped not less than 25 mm or shall be suitably flashed.

9.27.9.4. Lapped Strip Siding

1) Hardboard applied in horizontal lapped strips shall have not less than a 5 mm gap provided at the butted ends, which shall be sealed or otherwise protected with suitable mouldings.

2) The horizontal joints of siding described in Sentence (1) shall overlap not less than 1 mm per 16 mm width of siding board but not less than 9.5 mm for matched joint siding or 25 mm for lapped siding.

9.27.9.5. Clearance

1) Not less than 3 mm clearance shall be provided between hardboard cladding and door or window frames.

9.27.10. OSB and Waferboard

9.27.10.1. Material Standard

1) OSB and waferboard cladding shall conform to CSA O437.0, "OSB and Waferboard."

9.27.10.2. Thickness

1) OSB conforming to O-2 grade shall be not less than 6.0 mm thick where applied directly to sheathing.

2) OSB conforming to O-2 grade applied directly to framing or over furring strips shall conform to the thickness shown for plywood in Table 9.27.8.2. (See Note A-9.27.10.2.(2).)

3) OSB conforming to O-1 grade and waferboard conforming to R-1 grade shall be not less than 7.9 mm thick where applied directly to sheathing.

4) Where applied directly to framing or over furring strips, OSB conforming to O-1 grade and waferboard conforming to R-1 grade shall be not less than

a) 9.5 mm thick on supports spaced not more than 400 mm o.c., and

b) 12.7 mm thick on supports spaced not more than 600 mm o.c.

9.27.10.3. Panel Cladding

1) OSB and waferboard applied in panels shall have all edges supported and treated with a primer or sealer.

2) Not less than a 3 mm gap shall be provided between sheets in cladding described in Sentence (1).

3) Vertical joints in cladding described in Sentence (1) shall be protected with batten strips or sealant when the OSB and waferboard joints are not matched.

4) Horizontal joints in cladding described in Sentence (1) shall be lapped not less than 25 mm or shall be suitably flashed.

9.27.10.4. Clearance

1) Not less than a 3 mm clearance shall be provided between OSB and waferboard cladding and door or window frames.

9.27.11. Metal

9.27.11.1. Material Standards

1) Horizontal and vertical strip steel siding, including flashing and trim accessories, shall conform to CAN/CGSB-93.4, "Galvanized Steel and Aluminum-Zinc Alloy Coated Steel Siding, Soffits and Fascia, Prefinished, Residential."

2) Steel sheet cladding shall have a minimum thickness of 0.3 mm and conform to CAN/CGSB-93.3-M, "Prefinished Galvanized and Aluminum-Zinc Alloy Steel Sheet for Residential Use."

3) Horizontal and vertical strip aluminum siding, including flashing and trim accessories, shall conform to CAN/CGSB-93.2-M, "Prefinished Aluminum Siding, Soffits, and Fascia, for Residential Use." (See Note A-9.27.11.1.(3) and (4).)

4) Aluminum sheet cladding shall conform to CAN/CGSB-93.1-M, "Sheet, Aluminum Alloy, Prefinished, Residential," and shall have a thickness of not less than 0.58 mm, except that siding supported by backing or sheathing shall have a thickness of not less than 0.46 mm. (See Note A-9.27.11.1.(3) and (4).)

9.27.12. Vinyl Siding

9.27.12.1. Material Standard

1) Vinyl siding, including flashing and trim accessories, shall conform to CAN/CGSB-41.24, "Rigid Vinyl Siding, Soffits and Fascia."

9.27.12.2. Attachment

1) The attachment of vinyl siding shall conform to the requirements in Subsection 9.27.5. for metal siding.

9.27.13. Exterior Insulation Finish Systems

9.27.13.1. Application

1) Except as provided in Sentence (2), this Subsection applies to exterior insulation finish systems (EIFS) that

a) are covered in the scope of CAN/ULC-S716.1, "Exterior Insulation and Finish Systems (EIFS) - Materials and Systems," and

b) have a geometrically defined drainage cavity with a minimum cavity depth of 9.5 mm and an open area equal to not less than 13% of the area of a full-size EIFS panel.

(See Note A-9.27.13.1.(1).)

2) EIFS that are not covered by Sentence (1) shall comply with Part 5.

9.27.13.2. Materials

1) The materials used in EIFS shall conform to CAN/ULC-S716.1, "Exterior Insulation and Finish Systems (EIFS) – Materials and Systems."

2) The substrate on which the EIFS is installed shall

a) be compatible with that particular system (See Note A-9.27.13.2.(2)(a)), and

b) comply with the structural requirements for sheathing materials stated in Section 9.23.

9.27.13.3. Design and Installation

1) The design and installation of EIFS on the substrate described in Sentence 9.27.13.2.(2) shall comply with

a) CAN/ULC-S716.2, "Exterior Insulation and Finish Systems (EIFS) – Installation of EIFS Components and Water Resistive Barrier," and

b) CAN/ULC-S716.3, "Exterior Insulation and Finish System (EIFS) – Design Application."