Section 9.28. Stucco

9.28.1. General

9.28.1.1. Sheathing beneath Stucco

- 1) Sheathing shall be provided beneath stucco applied over wood-frame walls except as permitted in Article 9.28.4.2.
 - **2)** Where applied beneath stucco, sheathing shall conform to Subsection 9.23.17.

9.28.1.2. Lath and Reinforcing

- 1) Stucco lath or reinforcing shall be used to attach stucco to any substrate other than masonry.
- 2) Stucco lath or reinforcing shall be used to attach stucco to masonry where
- a) the masonry is soft-burned tile or brick of less strength than the stucco, or
- b) the masonry surface is not sound, clean and sufficiently rough to provide a good key.
- **3)** Stucco applied over masonry *chimneys* shall be reinforced.

9.28.1.3. Concrete Masonry Units

1) Stucco finish shall not be applied over concrete masonry units less than one month old unless the units have been cured by the autoclave process.

9.28.1.4. Clearance over Ground Level

1) Stucco shall be not less than 200 mm above finished ground level except when it is applied over concrete or masonry.

9.28.1.5. Flashing and Caulking

1) Flashing and caulking used with stucco shall conform to Subsections 9.27.3. and 9.27.4., except that if aluminum flashing is used, it shall be separated from the stucco by an impervious membrane or coating. (See Article 9.7.6.2. for caulking around window frames.)

9.28.2. Stucco Materials

9.28.2.1. Portland Cement

1) Portland cement shall conform to CSA A3001, "Cementitious Materials for Use in Concrete."

9.28.2.2. Aggregate

- 1) Aggregate shall be clean, well-graded natural sand or sand manufactured from crushed stone, gravel or air-cooled blast furnace slag and shall contain no significant amounts of deleterious material.
 - **2)** Aggregate grading shall conform to Table 9.28.2.2.

Table 9.28.2.2. Aggregate Grading for Stucco Forming Part of Sentence 9.28.2.2.(2)

Sieve Sizee mm	% Aggregate Passing Sieve		
Sieve Sizes, mm	Maximum	Minimum	
4	_	100	
2	-	90	
1	90	60	
0.5	60	45	
0.25	30	10	
0.125	5	-	

9.28.2.3. Water

1) Water shall be clean and free of significant amounts of deleterious material.

9.28.3. Fasteners

9.28.3.1. Materials

1) Fasteners for stucco lath or reinforcing shall be corrosion-resistant and of a material other than aluminum.

9.28.3.2. Nails and Staples

- 1) Nails for stucco lath or reinforcing shall be not less than 3.2 mm diam with a head diameter of not less than 11.1 mm.
 - 2) Staples for stucco lath or reinforcing shall be not less than 1.5 mm diam or thickness.
- **3)** Staples and nails for attaching stucco lath or reinforcing to vertical surfaces shall be of sufficient length to penetrate 25 mm into framing members or to the full depth of the sheathing where the sheathing is used for attachment.
 - 4) On horizontal surfaces nails for stucco lath or reinforcing shall be not less than 38 mm long.

9.28.4. Stucco Lath

9.28.4.1. Materials

- 1) Rib lath or expanded metal stucco mesh shall be
- a) copper-alloy steel coated with rust-inhibitive paint after fabrication, or
- b) galvanized.
- 2) Woven or welded wire mesh shall be galvanized.

9.28.4.2. No Sheathing Required

1) Sheathing need not be provided beneath stucco where not less than 1.19 mm diam galvanized wire is applied horizontally to the framing at vertical intervals of not more than 150 mm, or where paper-backed welded wire metal lath is used.

9.28.4.3. Stucco Lath Specifications

1) Stucco lath shall conform to Table 9.28.4.3.

Table 9.28.4.3. Stucco Lath

Forming Part of Sentence 9.28.4.3.(1)

Location	Type of Lath	Minimum Diam of Wire, mm	Maximum Mesh Opening	Minimum Mass, kg/m²
Vertical surfaces		1.15	25 mm	_
	Welded or woven wire	1.30	38 mm	_
		1.50	51 mm	_
	Stucco mesh reinforcing (expanded metal)	-	25.8 cm ²	0.98
Horizontal surfaces ⁽¹⁾	9.5 mm rib lath	_	_	1.84
	Cedar lath	_	_	_

Notes to Table 9.28.4.3.:

- (1) See Note A-Table 9.28.4.3.
- (2) Wire with other than a circular cross-section is acceptable if its cross-sectional area is equal to or greater than that of the wire listed.

9.28.4.4. Self-Furring Devices

1) Stucco lath shall be held not less than 6 mm away from the backing by means of suitable self-furring devices.

9.28.4.5. Application of Stucco Lath

- 1) Stucco lath shall be applied with the long dimension horizontal.
- 2) Horizontal and vertical joints in stucco lath shall be lapped not less than 50 mm.
- 3) End joints of stucco lath shall be staggered and shall occur over framing members.
- **4)** External corners of stucco lath shall be reinforced with a vertical strip of lath or reinforcing extending not less than 150 mm on both sides of the corner, or the lath or reinforcing shall extend around corners not less than 150 mm.

9.28.4.6. Fastening

- 1) Stucco lath shall be fastened in conformance with Subsection 9.27.5.
- **2)** Fasteners on vertical surfaces shall be spaced not more than
- a) 150 mm o.c. vertically and 400 mm o.c. horizontally, or
- b) 100 mm o.c. vertically and 600 mm o.c. horizontally.
- **3)** Nailing patterns other than those required in Sentence (2) are permitted to be used provided there are at least 20 fasteners per square metre of wall surface.
 - 4) Fasteners on horizontal surfaces shall be spaced not more than
 - a) 150 mm o.c. along the framing members when members are spaced not more than 400 mm o.c., and
 - b) 100 mm o.c. along members when members are spaced not more than 600 mm o.c.

9.28.5. Stucco Mixes

9.28.5.1. Mixes

1) Stucco mixes shall conform to Table 9.28.5.1.

Table 9.28.5.1. Stucco Mixes

Forming Part of Sentence 9.28.5.1.(1)

Materials, volume					
Portland Cement	Masonry Cement	Lime	Aggregate		
1	_	0.25 to 1	2.25 4		
1	1	_	3.25 to 4 parts per part of cementitious material		

9.28.5.2. Pigments

- 1) Pigment if used shall consist of pure mineral oxides inert to the action of sun, lime and cement.
- 2) Pigment shall not exceed 6% of the Portland cement by weight.

9.28.5.3. Mixing

- 1) Materials shall be thoroughly mixed before and after water is added.
- 2) Stucco shall be applied not later than 3 h after the initial mixing.

9.28.6. Stucco Application

9.28.6.1. Low Temperature Conditions

- 1) The base for stucco shall be maintained above freezing.
- **2)** Stucco shall be maintained at a temperature of not less than 10°C during application, and for not less than 48 h afterwards.

9.28.6.2. Number of Coats and Total Thickness

1) Stucco shall be applied with at least 2 base coats and one finish coat, providing a total thickness of not less than 15 mm, measured from the face of the lath or the face of the masonry where no lath is used.

9.28.6.3. First Coat

- 1) The first coat shall be not less than 6 mm thick, measured from the face of the lath or masonry, fully embedding the lath.
 - 2) The surface of the first coat shall be scored to provide a key with the second coat.

9.28.6.4. Second Coat

- 1) The second coat shall be not less than 6 mm thick.
- **2)** The surface of the second coat shall be lightly roughened to provide a key with the finish coat if the finish coat is other than stone dash.

9.28.6.5. Finish Coat

- 1) When the finish coat is other than stone dash, the base shall be dampened but not saturated before the finish coat is applied.
 - **2)** The thickness of the finish coat shall be not less than 3 mm.
- **3)** When a stone dash finish is used, the stone shall be partially embedded in the second coat before the second coat starts to set or stiffen.