MSJC Prescriptive Requirements for Anchored Masonry Veneer	
Item	Minimum Requirements
Applicability	prescriptive requirements may not be used where basic wind speed exceeds 110 mph
Support	must be supported on non-combustible foundations (i.e., concrete or masonry) *except* ▪ may be supported on preservative-treated wood foundations to a maximum height of 18 ft. above the support ▪ may be supported on wood construction if veneer weighs 40 psf or less with a height of 12 ft. or less, deflection of supporting member from dead and live loads is limited to 1/600, masonry is not in direct contact with wood, and expansion joint is installed between veneer supported on wood and veneer supported on foundation ▪ when veneer is supported by floor construction deflection is limited to 1/600
Support over openings	unless the veneer is self-supporting (e.g., masonry arches), veneer above openings must be supported on non-combustible steel, concrete, or masonry lintels with minimum 4 in. bearing on each side and deflection limited to 1/600
Maximum height above non-combustible foundation	30 ft., with an additional 8 ft. permitted for gable ends, *except* if veneer with cold-formed steel stud backing exceeds this height, it shall be supported by non-combustible construction for each story above the height limit (unless designed by engineering methods)
Anchors	▪ corrosion-resistant wire anchors not less than W 1.7 (9 gauge) with minimum 2 in. hook, or corrugated sheet metal not less than 7/8 in. wide with base metal thickness of 0.03 in. (22 gauge) and corrugations with a wavelength of 0.3 to 0.5 in. and an amplitude of 0.06 to 0.10, or adjustable anchors as above, or with pintles not less than W2.8 (3/16 in. diameter) with an offset not exceeding 1-1/4 in. and maximum clearance between connecting parts of 1/16 in., or joint reinforcement ▪ embedded in mortar joint (solid masonry units) or in mortar or grout (hollow masonry units) and extended into veneer wythe at least 1-1/2 in. with at least 5/8 in. mortar or grout cover to the exterior face ▪ maximum 1 in. between veneer and sheathing with corrugated anchors ▪ minimum 1 in. and maximum 4-1/2 in. between veneer and wood stud or framing with other anchors ▪ minimum bed joint thickness 2 x thickness of embedded anchor
Anchor spacing	▪ maximum 32 in. on center horizontal x 18 in. on center vertical ▪ adjustable two-piece anchors of W1.7 or 22 gauge corrugated sheet metal maximum 2.67 sq.ft. of wall area per anchor ▪ all other anchors maximum of 3.5 sq.ft. of wall area per anchor ▪ additional anchors around all openings larger than 16 in. in either dimension, spaced 3 ft. on center around opening, and within 12 in. of opening
Air space	minimum 1 in. clear air space
Sheathing	moisture-resistant membrane over non-moisture-resistant sheathing, or moisture-resistant sheathing (with joints taped)
Flashing	designed and detailed to resist water penetration into the building interior, with backing system designed and detailed to resist water penetration
Weep holes	minimum 3/16 in. diameter, maximum spacing 33 in., located immediately above flashing
Differential movement	design and detail veneer to accommodate differential movement
Stack bond	provide joint reinforcement of at least one W1.7 wire spaced a maximum of 18 in. on center vertically

Figure 10-38 Code requirements for masonry veneer. (*Based on Masonry Standards Joint Committee,* Building Code Requirements for Masonry Structures, *ACI 530/ASCE 5/TMS 402-02.*)

MSJC Prescriptive Seismic Requirements for Anchored Masonry Veneer	
Seismic Risk	Minimum Requirements
Seismic Design Categories A and B	Basic code requirements, no special provisions
Seismic Design Category C	Basic code requirements plus the following special provisions ▪ Isolate sides and top of anchored veneer from structure so that vertical and lateral seismic forces resisted by the structure are not imparted to the veneer.
Seismic Design Category D	Basic code requirements plus the following special provisions ▪ Isolate sides and top of anchored veneer from structure so that vertical and lateral seismic forces resisted by the structure are not imparted to the veneer. ▪ Support the weight of anchored veneer for each story independent of the other stories. ▪ Reduce the maximum wall area supported by each anchor to 75% of that normally required (maximum horizontal and vertical spacings are unchanged). ▪ Provide continuous, single-wire joint reinforcement of minimum W1.7 wire at a maximum spacing of 18 in. on center vertically.
Seismic Design Categories E and F	Basic code requirements plus the following special provisions ▪ Isolate sides and top of anchored veneer from structure so that vertical and lateral seismic forces resisted by the structure are not imparted to the veneer. ▪ Support the weight of anchored veneer for each story independent of the other stories. ▪ Reduce the maximum wall area supported by each anchor to 75% of that normally required (maximum horizontal and vertical spacings are unchanged). ▪ Provide continuous, single-wire joint reinforcement of minimum W1.7 wire at a maximum spacing of 18 in. on center vertically. ▪ Provide vertical expansion joints at all returns and corners. ▪ Mechanically attach anchors with clips or hooks to joint reinforcement required above.

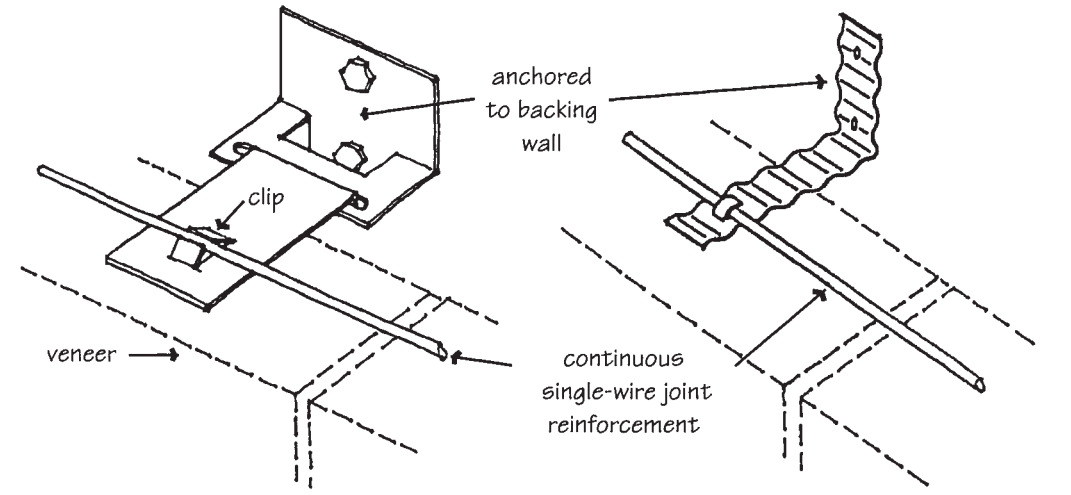

Figure 10-39 Seismic requirements for masonry veneer. (*Based on Masonry Standards Joint Committee,* Building Code Requirements for Masonry Structures, *ACI 530/ASCE 5/TMS 402.*)