



# STRUCTURAL GUIDELINES

Structural Material of Backing Wall	Backing Wall Requirements	Fastener/Anchor Recommendations (vii)(viii)(ix)(xi)
Wood Stud (i)	Backing wall to comply with applicable provisions of Sect. 2308 of IBC and local building codes	1/4" dia. S.S. wood screw with 1 1/2" min. penetration into backing wall
Steel Stud (ii)	Backing wall to comply with applicable provisions of Sect. 2211 of IBC and local building codes	#10 S.S. screws
CMU Hollow Core	Backing wall to comply with applicable provisions of Sect. 2109 of IBC and local building codes	1/4" dia. S.S. Powers Lok-Bolt with 1 1/8" embedment, 3 3/4" min. edge dist., & 8" min. end dist. @ hollow or filled core CMU (x)
Grout Filled Hollow Core (iii) Ground Joint (iv)		1/4" dia. Hilti HLC Sleeve with 1" embedment & 4" min. edge distance @ grout joint
Clay Brick (v)	Backing wall to comply with applicable provisions of Sect. 2109 of IBC and local building codes	1/4" dia. S.S. Powers Lok-Bolt with 1 1/8" embedment, 4" min. edge dist., & 4" min. end dist. @ clay brick (x)
Solid or Cored Grout Joint (iv)		1/4" dia. Hilti HLC Sleeve with 1" embedment & 4" min. edge distance @ grout joint
Concrete (vi)	Backing wall to comply with applicable provisions of Chapter 19 of IBC and local building codes	1/4" dia. S.S. Hilti Kwik Bolt 3 with 2" embedment & 3" min. edge distance (x)

## Alternative Fastener/Anchor Recommendations (x)

CMU Grout Filled Hollow Core (iii)	1/4" dia. S.S. Powers Wedge Bolt with 2" embedment, 3 3/4" min. edge dist., & 3 3/4" min. end dist. @ filled core CMU
Clay Brick (v) Solid Brick Without Coring Only	1/4" dia. S.S. Powers 'Double' Shield Expansion Anchor with 1 1/4" embedment, 4" min. edge dist., & 4" min. end dist.
Concrete (vi)	1/4" dia. S.S. Powers Wedge Bolt with 2" embedment & 2" min. edge distance or 1/4" dia. S.S. Powers Tapper with 1 1/2" embedment & 2" min. edge distance

## Notes

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| <ul style="list-style-type: none"> <li>i Based on use of spruce, pine, or fir wood species</li> <li>ii Studs to be minimum 16 gauge steel with 33 ksi yield stress</li> <li>iii Hollow core CMU to be filled with minimum 1500 psi strength grout</li> <li>iv Grout to have a minimum compressive strength of 2000 psi</li> <li>v Hollow or solid clay brick to conform with ASTM C62 standard</li> <li>vi Concrete to have a minimum compressive strength of 3000 psi</li> <li>vii Fastener/Anchor recommendations based on maximum wind load of 78 psf</li> <li>viii Fastener/Anchors to be installed a minimum of 3/8" from track edges at a maximum spacing of 18" apart</li> </ul> | <ul style="list-style-type: none"> <li>ix It is the responsibility of the engineer of record to verify the structural integrity of the backing wall based on the load imposed by the system panels and other applicable material, live, seismic, snow and wind loading conditions.</li> <li>x Alternative fastener/anchors recommendations available from supplier upon request.</li> <li>xi Substitutions of recommended fastener/anchors should only be made after structural analysis by engineer of record.</li> </ul> |
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