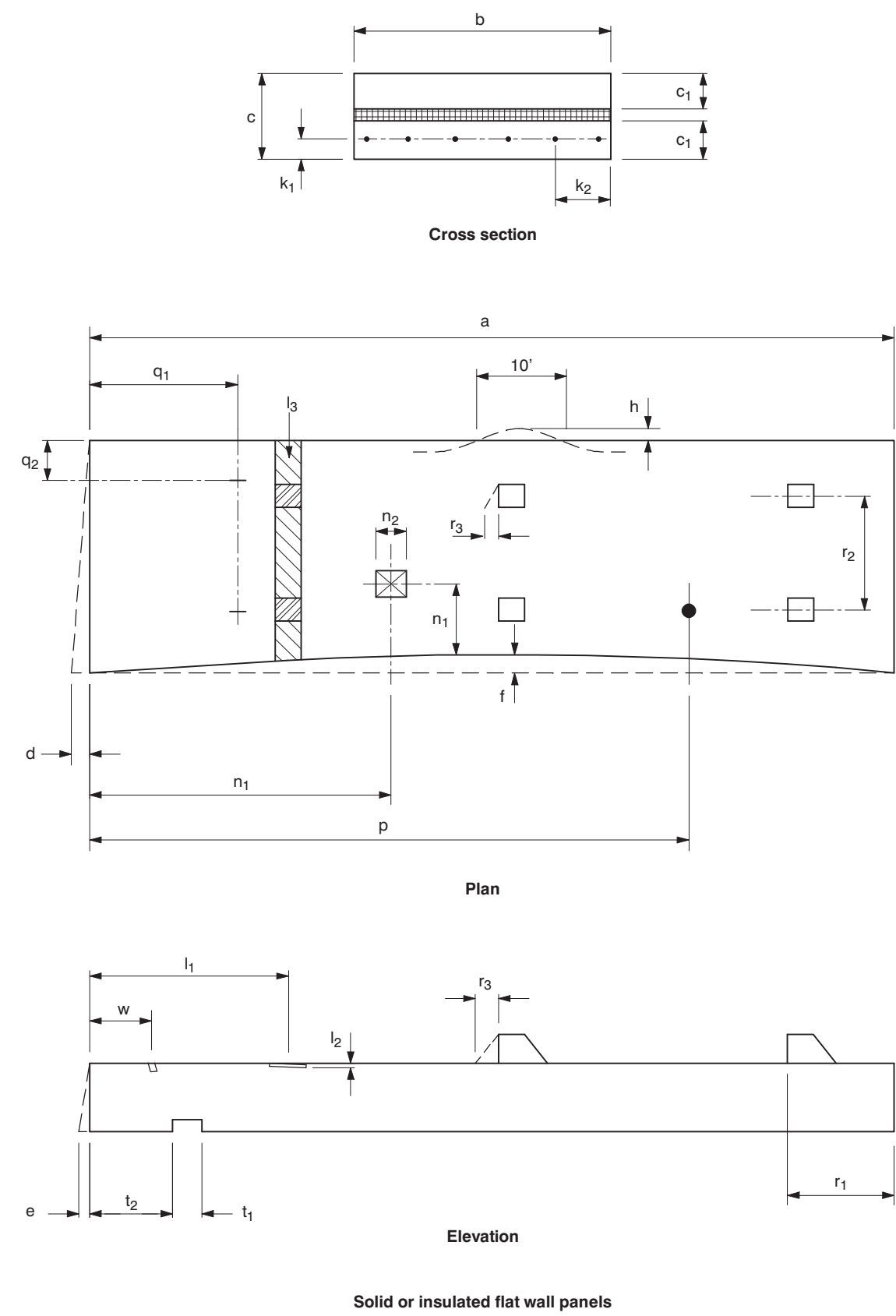
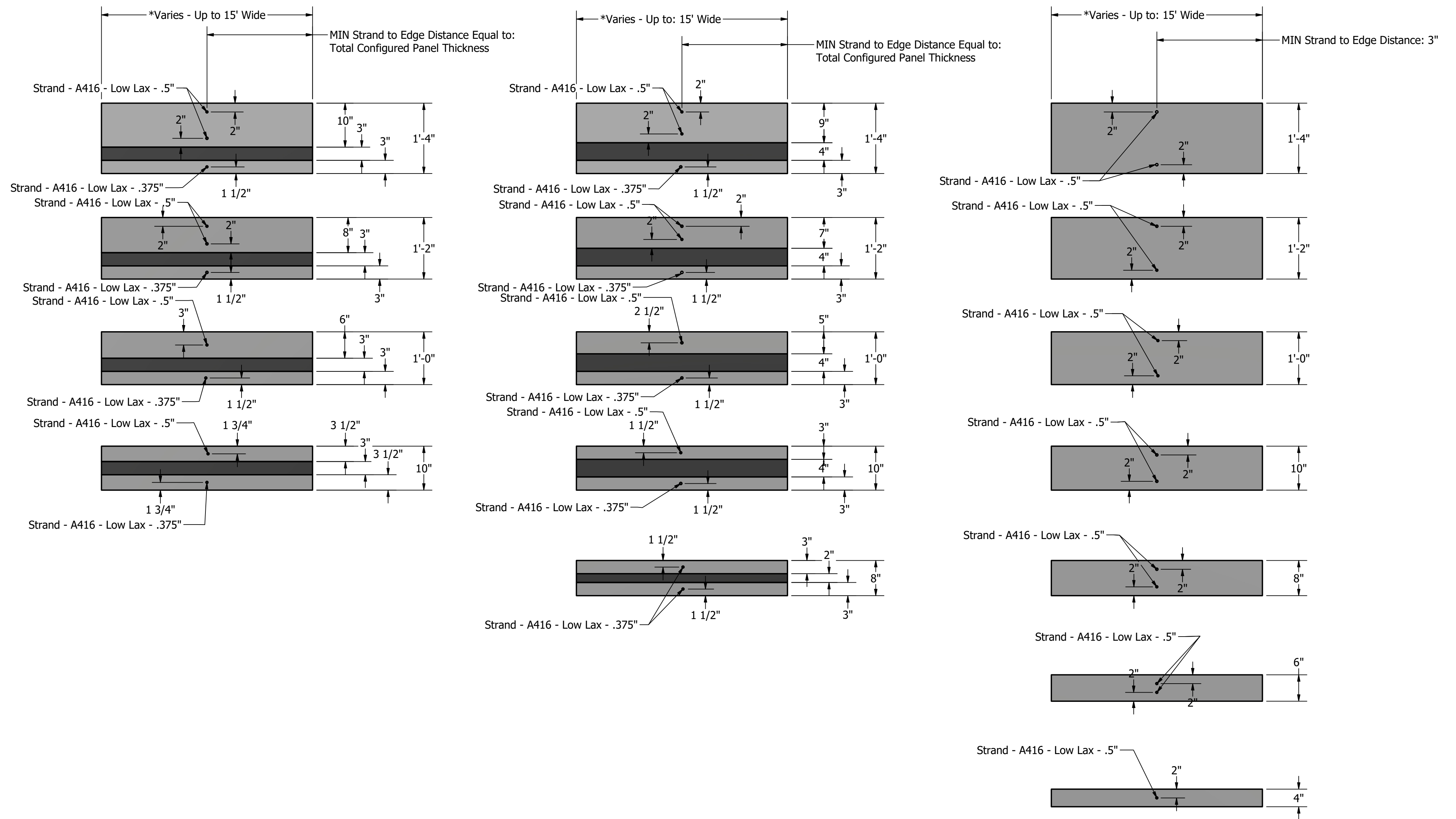


Fig. 10.2.1 Solid or Insulated Flat Structural Wall Panels



10.2 Solid or Insulated Flat Structural Wall Panels

- a = Length ±½ in. [±13 mm]
- b = Width (overall) ±¼ in. [±6 mm]
- c = Depth (overall) ±¼ in. [±6 mm]
- c₁ = Wythe thickness ±3/8 in. [±10 mm]
- d = Variation from specified plan end squareness or skew ±1/8 in. per 12 in. width, ±½ in. maximum [±3 mm per 300 mm width, ±13 mm maximum]
- e = Variation from specified elevation end squareness or skew ±1/8 in. per 12 in. [±3 mm per 300 mm]
- f = Sweep ±1/8 in. per 20 ft., ±3/8 in. maximum [±3 mm per 6 m, ±10 mm maximum]
- h = Local smoothness of any surface ¼ in. in 10 ft. [6 mm in 3 m]
- i = Bow Length/360 maximum
- i₁ = Differential bowing between adjacent panels of the same design ½ in. [13 mm]
- j = Warp (from adjacent corner) 1/16 in. per foot [1.5 mm per 300 mm]
- k₁ = Location of strand perpendicular to plane of panel ±¼ in. [±6 mm]
- k₂ = Location of strand parallel to plane of panel ±1 in [±25 mm]
- l₁ = Location of embedment ±1 in. [±25 mm]
- l₂ = Tipping and flushness of embedment ±¼ in. [±6 mm]
- l₃ = Concrete surface between embedments to receive continuous ledger, relative to plane of embedments . . . -¼ in., +0 in. [- 6 mm, +0 mm]
- n₁ = Location of breakout ±1 in. [±25 mm]
- n₂ = Size of blockouts ±½ in. [±13 mm]
- p = Location of inserts for structural connections ±½ in. [±13 mm]
- q₁ = Location of handling device parallel to length of panel ±6 in. [±150 mm]
- q₂ = Location of handling device transverse to length of panel ±1 in. [±25 mm]
- r₁ = Location of haunch bearing elevation from end of panel ±¼ in. [±6 mm]
- r₂ = Transverse distance between haunches ±¼ in. [±6 mm]
- r₃ = Variation from specified haunch bearing surface slope ±1/8 in. per 18 in., ±¼ in. maximum [±3 mm per 450 mm, ±6 mm maximum]
- t₁ = Size of architectural feature ±1/8 in. [±3 mm]
- t₂ = Location of architectural feature ±1/8 in. [±3 mm]
- w = Location of flashing reglet ±¼ in. [±6 mm]



10.1 Architectural Wall Panels*

- a₁ = Overall height of unit measured at the face exposed to view:
 Up to 10 ft. [3 m] ±1/8 in. [±3 mm]
 10 to 20 ft. [3 to 6 m] +1/8 in., -3/16 [+3 mm, -5 mm]
 20 to 40 ft. [6 to 12 m] ±¼ in. [±6 mm]
 Greater than 40 ft. [12 m] ±1/16 in. per 10 ft. [±1.5 mm per 3 m]
- a₂ = Overall height of unit measured at the face not exposed to view:†
 Up to 10 ft. [3 m] ±¼ in. [±6 mm]
 10 to 20 ft. [3 to 6 m] +¼ in., -5/8 [+6, -10 mm]
 20 to 40 ft. [6 to 12 m] ±5/8 in. [±10 mm]
 Greater than 40 ft. [12 m] ±1/8 in. per 10 ft. [±3 mm per 3 m]
- b = Overall width of unit measured at the face exposed to view:
 Up to 10 ft. [3 m] ±1/8 in. [±3 mm]
 10 to 20 ft. [3 to 6 m] +1/8 in., -1/16 [+3 mm, -5 mm]
 20 to 40 ft. [6 to 12 m] ±¼ in. [±6 mm]
 Greater than 40 ft. [12 m] ±1/16 in. per 10 ft. [±1.5 mm per 3 m]
- b₁ = Rib width ±1/8 in. [±3 mm]
- b₂ = Distance between ribs ±1/8 in. [±3 mm]
- b₃ = Rib to edge of flange ±1/8 in. [±3 mm]
- b₈ = Overall width of unit measured at the face not exposed to view:
 Up to 10 ft. [3 m] ±¼ in. [±6 mm]
 10 to 20 ft. [3 to 6 m] +¼ in., -3/8 in. [+6, -10 mm]
 20 to 40 ft. [6 to 12 m] ±3/8 in. [±10 mm]
 Greater than 40 ft. [12 m] ±1/8 in. per 10 ft. [±3 mm per 3 m]
- c = Total thickness +¼ in., -1/8 in. [+6, -3 mm]
- c₁ = Flange thickness +¼ in., -1/8 in. [+6, -3 mm]
- c₂ = Dimensions of haunches ±¼ in. [±6 mm]
- e = Variation‡ from square or designated skew ±1/8 in. per 6 ft., ±½ in. minimum
 [±3 mm per 2 m, ±13 mm minimum]
- h = Local smoothness, unconcealed surfaces ¼ in. per 10 ft. [±6 mm per 3 m]
- i = Bowing ± Length/360, to a maximum of 1 in. [25 mm]
- j = Warp (from adjacent corner) 1/16 in. per ft. [1.5 mm per 300 mm]
- l₁ = Location of weld plates ±1 in. [±25 mm]
- l₂ = Tipping and flushness of plates ±¼ in. [±6 mm]
- l₄ = Allowable rotation of plate, channel insert, electrical box 2 degrees
 ¼ in. [6 mm] maximum measured at perimeter of insert
- m₂ = Haunch bearing surface tipping and flushness of bearing plates ±1/8 in. [±3 mm]
- m₃ = Difference in relative position of adjacent haunch bearing surfaces from specified relative position ±¼ in. [±6 mm]
- n₁ = Location of opening within panel ±¼ in. [±6 mm]
- n₂ = Length and width of blockouts and openings within one unit ±¼ in. [±6 mm]
- n₃ = Location and dimensions of blockouts hidden from view and used for HVAC and utility penetrations ±¾ in. [±19 mm]
- o = Position of sleeve ±½ in. [±13 mm]
- p = Position of insert ±½ in. [±13 mm]
- q = Position of handling devices ±3 in. [±75 mm]
- r₁ = Location of bearing surface from end of member ±¼ in. [±6 mm]
- s₁ = Reinforcing steel and welded wire reinforcement:
 Where position has structural implications or affects concrete cover ±¼ in. [±6 mm]
 Otherwise ±½ in. [±13 mm]
- s₃ = Reinforcing steel extending out of member ±½ in. [±13 mm]
- s₄ = Location of strand:
 Perpendicular to panel ±¼ in. [±6 mm]
 Parallel to panel ±1 in. [±25 mm]
- t₁ = Dimensions of architectural features and rustications ±1/8 in. [±3 mm]
- t₂ = Location of rustication joints ±1/8 in. [±3 mm]
- w₁ = Location of flashing reglets ±¼ in. [±6 mm]
- w₂ = Location of flashing reglets at edge of panel ±1/8 in. [±3 mm]
- w₃ = Size of reglets for glazing gaskets ±1/8 in. [±3 mm]
- z = Electrical outlets, hose bibs, etc. ±½ in. [±13 mm]

* Units shall be manufactured so that the face of each unit which is exposed to view after erection complies with the following dimensional requirements.

† Unless joint width and fit-up requirements demand more stringent tolerance.

‡ Applies to both panel and to major openings in panel. Tolerances apply to the difference of the two diagonal measurements.

Fig. 10.1.1 Architectural Wall Panels

