NPCA vs. PCI Comparison

VersaCore+*Green* Wall Panel Manufacturing Tolerances

	Fabcon	MNL 116	NPCA
a = Length	± 1/2 in. [± 13 mm]	✓	1/8" per 10' ≤ 3/4"
b = Width (overall)	± 1/4 in. [±6mm]	✓	+1/8" < 10' +1/8" -3/16" > 10' but < 20'
c = Web Width The total web width defined by the sum of the actual measured values of "b_1" shall not be less than 85 percent of the sum of the nominal web widths "$b_{1,\ nominal}$" with localized areas		N/A	✓
d = Depth (overall)	± 1/4 in. [± 6 mm]	✓	+1/4" -1/8"
e = Top Flange Depth Top flange area defined by the actual measured values of average "e" x "b" shall not average less than 85 percent of the nominal area calculated by "$e_{,\ nominal}$" x "$b_{nominal}$"	≥ 3/4 in. [≥ 18mm]	N/A	✓
f = Bottom Flange Depth Bottom flange area defined by the actual measured values of average "f" x "b" shall not be less than 85 pZercent of the nominal area calculated by "$f_{,\ nominal}$" x "$b_{nominal}$"	≥ 3/4 in. [≥ 18mm]	N/A	✓
g = Variation from Specified Plan End Squareness or Skew	± 1/8 in. per 12 in. width, ± 1/2 in. maximum [± 3 mm per 300 mm width, ± 13 mm maximum]	✓	✓
h = Variation from Specified Elevation End Squareness or Skew	± 1/8 in. per 12 in. [± 3 mm per 300 mm]	✓	1/16" per 12" no greater than 1"
i = Sweep	± 1/8 in. per 20 ft., + 3/8 in. maximum [± 3 mm per 6 m, ± 10 mm maximum]	✓	✓
j = Location of Strand Perpendicular to Plane of Panel	± 1/4 in. [±6 mm]	✓	✓
k = Location of Strand Parallel to Plane of Panel	± 1/2 in [±13 mm]	± 1"	✓
l = Location of Embedment	± 1 in. [± 13 mm]	✓	± 1/2" inserts ± 1" weld plates
m = Tipping and Flushness of Embedment	± 1/4 in. [±6 mm]	✓	✓
n = Concrete Surface Between Embedments to Receive Continuous Ledger, Relative to Plane of Embedments	- 1/4 in., + 0 in. [- 6 mm, + 0 mm]	✓	✓
o = Location of Blockout	± 1 in. [± 25 mm]	✓	✓
p = Size of Blockouts	± 1/2 in. [±13 mm]	✓	✓
q = Location of Opening	± 1/4 in. [± 6 mm]	± 1"	✓
r = Height of Opening	+ 3/4 in. -1/4 in.	± 1/2"	✓
s = Width of Opening	+ 1 in. - 1/2 in.	± 1/2"	✓
t = Location of Inserts for Structural Connections	± 1 in. [± 25 mm]*	± 1/8"	1/2"
u = Size of Architectural Feature	± 1/4 in. [± 6 mm]	± 1/8"	✓
v = Location of Architectural Feature	± 1/4 in. [± 6 mm] ≥ 3 in. [≥ 75 mm]	NA	✓
Weight Actual measured value shall not exceed 110% of the nominal published unit weight used in the design.		NA	✓
Bow	≤ a/360	✓	1/360 x diagonal but greater than 1"
Differential Bowing Between Adjacent Panels of the same design	± 1/2 in. [± 13 mm]	✓	✓
Warp	± 1/16 in. per foot [± 1.5 mm per 300 mm] of distance from adjacent corner	✓	✓

***For Further Details Contact Your Fabcon Representative**

Concrete is a variable material. Even after final finishing, there will be a range of color and texture in the surface. Some variations are to be expected.

In general Fabcon steel form finish compiles with 4th Edition PCI MNL 116 appendix "C" for a grade "B" which states in part

"All air holes over 1/4 in. (6 mm) in size should be filled. Air holes between 1/8 and 1/4 in. (3 and 6 mm) in width that occur in high concentration (more than one per 2" by 2" [1300 mm2]) should be filled. Surface blemishes due to holes or dents in forms should be repaired. Discoloration should be permitted at form joints. This finish may be used on visually exposed structural members such as columns or walls...."