

June 16, 2009

Work Prepared For:

 Miami Tech, Inc.
 3611 NW 74th Street
 Miami, FL 33147

 Certification valid for
 one (1) project site
 only.

Regarding: A/C Unit Tiedown to Concrete

Attention: Building Official

This office has reviewed the design requirements for the installation of air conditioning units onto concrete slabs using Miami Tech Condensing Unit Tiedowns (CUTD-1). The tiedown or clip used for the installation shall be fabricated using galvanized steel (ASTM A653, Grade 33 minimum), measuring 4"-18" tall x 1" wide x 14ga (0.070" minimum), with layout as described below, and a maximum height of 60" per unit. The lower leg of each clip shall be anchored to the concrete host structure with (1) 1/4" diameter ITW Buildex (or equivalent) carbon steel Tapcon embedded 1-3/4" minimum into 3,000 psi concrete with 2-1/2" minimum edge distance. The upper leg of each clip shall utilize a minimum of (2) #10 sheet metal screws anchored through the clip into the minimum 22-gauge (0.028" minimum) steel housing (ASTM A653, Grade 33 minimum). Maximum wind pressures for use with this installation are as noted below; additional anchors may be utilized to achieve higher pressures, as shown:

Table 1: (1) clip required at each corner of unit or (2) each opposite face for a total of (4) per unit

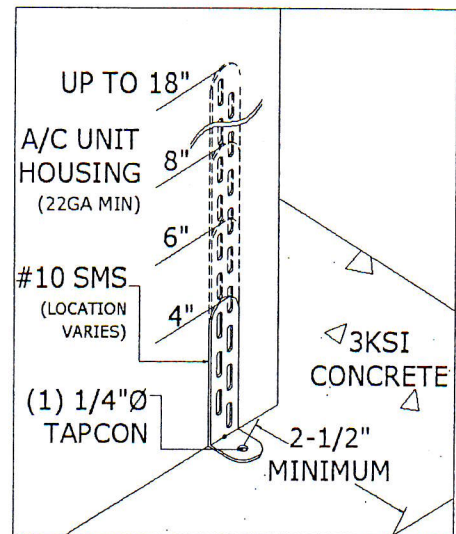
Maximum Unit Face, Area (ft ²)	(2) SMS	(3) SMS	(4) SMS
4	+/- 114 PSF	+/- 150 PSF	+/- 150 PSF
7	+/- 65 PSF	+/- 98 PSF	+/- 127 PSF
9	+/- 50 PSF	+/- 76 PSF	+/- 98 PSF
12	+/- 38 PSF	+/- 57 PSF	+/- 74 PSF
15	+/- 30 PSF	+/- 45 PSF	+/- 59 PSF

Note: (1) Tapcon acceptable for both one- and two-anchor hole versions of the CUTD.

Table 2: (2) clips required at each corner of unit or (4) each opposite face for a total of (8) per unit

Maximum Unit Face, Area (ft ²)	(2) SMS	(3) SMS	(4) SMS
20	+/- 45 PSF	+/- 68 PSF	+/- 91 PSF
25	+/- 36 PSF	+/- 54 PSF	+/- 73 PSF
30	+/- 33 PSF	+/- 50 PSF	+/- 66 PSF
35	+/- 30 PSF	+/- 46 PSF	+/- 61 PSF

Note: (1) Tapcon acceptable for both one- and two-anchor hole versions of the CUTD.



All other installation work shall follow the minimum requirements of the 2007 Florida Building Code with 2009 supplements. Thank you for your attention to this matter.

Respectfully,


JUN 17 2009

 Frank L. Bennardo, P.E.
 ENGINEERING EXPRESS®
 #PE0046549 | Cert. Auth. 9885
 09-MTI-0001

February 16, 2010

Work Prepared For:

Miami Tech, Inc.
3611 NW 74th Street
Miami, FL 33147

Regarding: Aluminum A/C Unit Tiedown to Concrete

Attention: Building Official

Certification valid for one (1) project site only. Valid with raised seal only.

This office has reviewed the design requirements for the installation of air conditioning units onto concrete slabs using Miami Tech Condensing Unit Aluminum Tiedowns (CUTDA-1). The tiedown or clip used for the installation shall be fabricated using aluminum alloy 5052-H32, measuring 4"-18" tall x 1" wide x 0.080" minimum, with layout as described below, and a maximum height of 60" per unit. The lower leg of each clip shall be anchored to the concrete host structure with (1) 1/4" diameter ITW Buildex (or equivalent) carbon steel Tapcon embedded 1-3/4" minimum into 3,000 psi concrete with 2-1/2" minimum edge distance. The upper leg of each clip shall utilize a minimum of (2) #10 Galvanized sheet metal screws (SAE Grade 2) anchored through the clip into the minimum 22-gauge (0.028" minimum) steel housing (ASTM A653, Grade 33 minimum). Maximum wind pressures for use with this installation are as noted below; additional anchors may be utilized to achieve higher pressures, as shown:

Table 1: (1) clip required at each corner of unit or (2) each opposite face for a total of (4) per unit

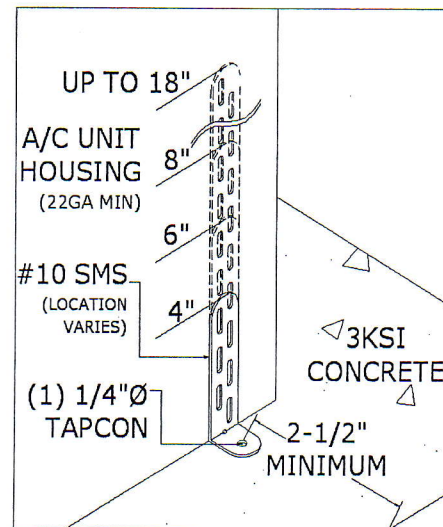
Maximum Unit Face, Area (ft ²)	(2) SMS	(3) SMS	(4) SMS
4	+/- 114 PSF	+/- 150 PSF	+/- 150 PSF
7	+/- 65 PSF	+/- 98 PSF	+/- 127 PSF
9	+/- 50 PSF	+/- 76 PSF	+/- 98 PSF
12	+/- 38 PSF	+/- 57 PSF	+/- 74 PSF
15	+/- 30 PSF	+/- 45 PSF	+/- 59 PSF

Note: (1) Tapcon acceptable for both one- and two-anchor hole versions of the CUTD.

Table 2: (2) clips required at each corner of unit or (4) each opposite face for a total of (8) per unit

Maximum Unit Face, Area (ft ²)	(2) SMS	(3) SMS	(4) SMS
20	+/- 45 PSF	+/- 68 PSF	+/- 91 PSF
25	+/- 36 PSF	+/- 54 PSF	+/- 73 PSF
30	+/- 33 PSF	+/- 50 PSF	+/- 66 PSF
35	+/- 30 PSF	+/- 46 PSF	+/- 61 PSF

Note: (1) Tapcon acceptable for both one- and two-anchor hole versions of the CUTD.



The contractor shall be responsible for insulation of dissimilar metals to prevent electrolysis.

All other installation work shall follow the minimum requirements of the 2007 Florida Building Code with 2009 supplements. Thank you for your attention to this matter.

Respectfully,

(Handwritten signature)
FEB 17 2010

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