



This combination qualifies for a Federal Energy  
Efficiency Tax Credit when placed in service  
between Feb 17, 2009 and Dec 31, 2014.

# Certificate of Product Ratings

AHRI Certified Reference Number: 5756177

Date: 8/10/2015

Product: Split System: Air-Cooled Condensing Unit, Coil with Blower

Outdoor Unit Model Number: GSX160481F\*

Indoor Unit Model Number: ASPT48D14A\*

Manufacturer: GOODMAN MANUFACTURING CO., LP.

Trade/Brand name: GOODMAN; JANITROL; AMANA DISTINCTIONS; EVERREST; ONE HOUR AIR  
CONDITIONING AND HEATING; ENERGI AIR

Region: All (AK, AL, AR, AZ, CA, CO, CT, DC, DE, FL, GA, HI, ID, IL, IA, IN, KS, KY, LA, MA, MD, ME,  
MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX,  
UT, VA, VT, WA, WV, WI, WY, U.S. Territories)

Region Note: Central air conditioners manufactured prior to January 1, 2015, are eligible to be  
installed in all regions until June 30, 2016. Beginning July 1, 2016, central air conditioners  
can only be installed in region(s) for which they meet the regional efficiency requirement.

Series name: GSX16

Manufacturer responsible for the rating of this system combination is GOODMAN MANUFACTURING CO., LP.

Rated as follows in accordance with AHRI Standard 210/240-2008 for Unitary Air-Conditioning and Air-Source  
Heat Pump Equipment and subject to verification of rating accuracy by AHRI-sponsored, independent, third  
party testing:

Cooling Capacity (Btuh):	45000
EER Rating (Cooling):	13.00
SEER Rating (Cooling):	16.00
IEER Rating (Cooling):	

\* Ratings followed by an asterisk (\*) indicate a voluntary rerate of previously published data, unless accompanied with a WAS, which indicates an involuntary rerate.

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## CERTIFICATE VERIFICATION

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CERTIFICATE NO.:

130837082789233750



A FRANK L. BENNARDO, P.E., INC. INNOVATION

WELLINGTON

June 16, 2009

1500002933

Work Prepared For:

CERTIFIED COPY

Miami Tech, Inc.  
3611 NW 74<sup>th</sup> 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

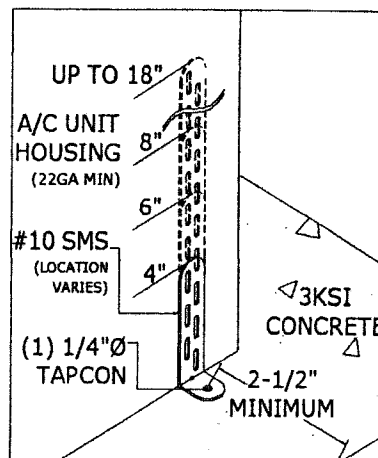
Maximum Unit Face, Area (ft <sup>2</sup> )	(2) SMS	(3) SMS	(4) SMS
4	+/- 114 PSF	+/- 150 PSF	+/- 150 PSF
7	+/- 65 PSF	+/- 98 PSF	+/- 127 PSF
9	+/- 50 PSF	+/- 76 PSF	+/- 98 PSF
12	+/- 38 PSF	+/- 57 PSF	+/- 74 PSF
15	+/- 30 PSF	+/- 45 PSF	+/- 59 PSF

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 <sup>2</sup> )	(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.  
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