



# CALCULATIONS

## **NAVAIRSEFAC Calibration Lab**

P532V

Naval Air Station Joint Reserve Base New Orleans  
Belle Chasse, LA

For  
Broadmoor, L.L.C.

March 17, 2010

US DEPARTMENT OF THE NAVY – NAVFAC SOUTHEAST

*Prepared by:*  
Dammon Engineering  
1095 Florida Avenue  
Slidell, La. 70458  
985-649-5832  
dammonengineering.com

**NAVAIRSEFAC  
NAS JRB NEW ORLEANS  
BELLE CHASSE, LA  
FOR BROADMOOR, LLC  
Calibration Lab**

**SCOPE OF WORK:**

Determine minimum sizes for metal stud walls subject to 130 mph wind loads. Provide details for all related anchoring, bracing, and fastening systems.

**STANDARDS USED:**

Cold Formed Metal Framing Specification Section 05 40 00  
AISI S100-2007  
AISI Manual Cold-Formed Steel Design 2007  
ASCE 7-98  
IBC 2006

**RESULTS SUMMARY:**

**Exterior wall studs -**

Unbraced height

0'-0" - 14'-0"

Use 6" web, 2.5" flange, 16ga. @ 12" o.c. Telling Industries (600S250-54 50ksi)

14'-0" - 16'-8"

Use 6" web, 3" flange, 14ga. @ 12" o.c. Telling Industries (600S300-68 50ksi)

16'-8" - 19'-3"

Use 6" web, 3" flange, 12ga. @ 12" o.c. Telling Industries (600S300-97 50ksi)

**Interior walls studs-**

Unbraced height

0'-0" - 17'-0"

Use 3-5/8" web, 1.6" flange, 16ga. @ 16" o.c. Telling Industries (362S162-54 33ksi)

**Track -**

Exterior walls

Use 6" web, 16ga. Telling Industries (600T125-54 33ksi)

or Dietrich SLP-TRK 16ga. slotted track where wall abuts heavy duty rigid board insulation.

See sheet A-2 for details.

Interior walls

Use 3-5/8" web, 20ga. Telling Industries (362T125-30 33ksi)

or Dietrich SLP-TRK 16ga. slotted track where wall abuts heavy duty rigid board insulation.

See sheet A-2 for details.

**Anchors -**

Exterior walls

Use Simpson Easy-set EZAC drive-pin expansion anchors 1/2"x6"L @ 24" o.c.

Interior walls

Use Simpson Easy-set EZAC drive-pin expansion anchors 1/4"x1-3/4" @ 24" o.c.

**Structural Clips -**

Exterior wall deflection clip to wind beam.

Use Dietrich FCSC 5-1/2" at each stud connection.

**Horizontal Bracing -**

Exterior walls

Use continuous 1-1/2" 16ga. CRC 150U050-54 @ 4'-0" o.c. Vertical.

Interior walls

Use continuous 1-1/2" 16ga. CRC 150U050-54 @ 6'-0" o.c. Vertical.

**CALCULATIONS:**

See the following calculations and submittal sheets.