MAXIMUM CONTENT CAPACITY (POUNDS) (1),(2),(3) 

HILI KMW BOLT T 2 ANCHORS IN NORMAL-WEIGHT CONCRETE

MAX LOCATION IN BUILDING (2,3)

RACK ENCLOSURE WEIGHT GROUND 1/3 2/3 ROOF

MAX CONTENT CAPACITY (POUNDS) (1),(2),(3) 

HILI KMW BOLT T 2 ANCHORS IN LIGHT-WEIGHT CONCRETE

MAX LOCATION IN BUILDING (2,3)

RACK ENCLOSURE WEIGHT GROUND 1/3 2/3 ROOF

INSTALLATION NOTES

1. MAXIMUM SEISMIC CONTENT CAPACITY OF THE RACK ENCLOSURE IS PROVIDED IN THE CAPACITY TABLE FROM THE DRAWINGS. THE STRUCTURAL ENGINEER OF RECORD (DER) SHALL VERIFY THAT THE WEIGHT OF THE RACK ENCLOSURE CAPTIONS DOES NOT EXCEED THE APPROVED CAPACITIES FOR THE LOCATION OF INSTALLATION.

2. THE SDR IS REQUIRED TO VERIFY THAT THE EXISTING STRUCTURE IS AS ABLE TO SUPPORT THE LOADS AND REACTIONS IMPRESSED BY THE ANCHORED RACK ENCLOSURE IN ADDITION TO ALL OTHER LOADS AND FORCES.

3. RACK ENCLOSURES MAY BE MOUNTED TO EITHER A LIGHT-WEIGHT OR HIGH-WEIGHT, REINFORCED CONCRETE FLOOR OR SLAB WITH A MINIMUM CONCRETE COMpressive STRENGTH (F'c) OF 3,000 PSI.

4. REINFORCED CONCRETE FLOOR SLABS SHALL HAVE A MINIMUM THICKNESS BASED ON THE ANCHOR TYPE AS NOTED BELOW:

   - HILI KMW BOLT T 2 CONCRETE COMPOSITION AND STRENGTH SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY.

5. INSTALLATION OF THE RACK ENCLOSURES IS LIMITED TO INTERIOR OR ENVIRONMENTALLY PROTECTED LOCATIONS.

RACK ENCLOSURE CAPACITY TABLES

MAXIMUM CONTENT CAPACITY (POUNDS) (1),(2),(3) 

HILI KMW BOLT T 2 ANCHORS IN NORMAL-WEIGHT CONCRETE

MAX LOCATION IN BUILDING (2,3)

RACK ENCLOSURE WEIGHT GROUND 1/3 2/3 ROOF

MAXIMUM CONTENT CAPACITY (POUNDS) (1),(2),(3) 

HILI KMW BOLT T 2 ANCHORS IN LIGHT-WEIGHT CONCRETE

MAX LOCATION IN BUILDING (2,3)

RACK ENCLOSURE WEIGHT GROUND 1/3 2/3 ROOF

TABLE FOOTNOTES:

1. INCLUDE ALL DRI SERIES RACK ENCLOSURES UP TO A HEIGHT OF 44" SPACES.

2. ENCLOSURES SHALL BE MOUNTED WITH MRK-24 MOUNTING KIT.

3. ENCLOSURES SHALL BE MOUNTED WITH MRK-24 MOUNTING KIT.

CONCRETE ANCHOR NOTES

1. CONCRETE ANCHORS SHALL BE OF THE FOLLOWING TWO TYPES MANUFACTURED BY HILI, INC. OF CARBON STEEL WITH BINDING, EMBRACE, AND SPACING AS SHOWN ON THE DRAWINGS.

   - HILI KMW-OR (FOREST CONFIGURATION) UNDERANCHOR ANCHORS (C) EX-13494

   - HILI KMW BOLT T 2 (KB-TZ) EXPANSION ANCHORS (C) EX-13497

2. THE DISTANCE FROM THE ANCHOR TO THE EDGE OF CONCRETE SLAB SHALL BE GREATER THAN OR EQUAL TO THE LARGER OF:

   - 1.5 TIMES THE ANCHOR EMBRACE DEPTH OR

   - 10 TIMES THE ANCHOR DIAMETER

3. LOCATE ALL EXISTING REINFORCING BARS WITHIN 12 INCHES OF PROPOSED ANCHOR LOCATIONS PRIOR TO DRILLING FOR CONCRETE ANCHORS. DO NOT CUT, CORE, OR DRILL THROUGH EXISTING REINFORCING BARS WITHOUT PRIOR APPROVAL FROM THE SDR.

4. ALL CONCRETE ANCHORS SHALL BE MOUNTED WITH PROPER TOOLS AND PROCEDURES IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ICC EVALUATION SERVICE REPORTS REFERENCED ABOVE.

5. TENSION TESTING SHALL OCCUR 24 HOURS OR MORE AFTER INSTALLATION OF THE CONCRETE ANCHORS.

6. APPLY TENSION TEST LOADS TO THE CONCRETE ANCHORS WITHOUT REMOVAL OF THE NUT. IF NUT REMOVAL IS REQUIRED, REMOVE THE NUT AND INSTALL A THREADED COUPLER TO THE SAME THREAD AS THE ORIGINAL NUT USING A TORQUE WRENCH AND THEN APPLY THE TENSION TEST LOAD.

7. REACTION LOADS FROM TEST FIXTURES MAY BE SUPPORTED IN CLOSE PROXIMITY TO THE ANCHOR BEING TESTED PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY THE FIXTURES.

8. TEST EQUIPMENT SHAL BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURE RESULTS.

9. ONE HALF (50%) OF EACH APPLICATION OF CONCRETE ANCHORS SHALL BE TESTED FOR TENSION FOR 5 MINUTES ACCORDING TO THE TEST LOADS SHOWN BELOW. ONE APPLICATION OF ANCHORS SHALL BE DEEMED AS THOSE ANCHORS INSTALLED BY A SINGLE CREW IN A SINGLE DAY. IF ANY ANCHOR FAILS IT SHALL BE REPLACED, RE-TESTED, AND ALL ANCHORS INSTALLED gleich DAY SHALL BE RE-TESTED. IF ANY ANCHOR FAILS, ALL PREVIOUSLY INSTALLEND ANCHORS INSTALLED BY THAT CREW SHALL BE TESTED UNTIL (2X) CONSECUTIVE ANCHORS PASS THEIR RESPECTIVE TESTING.

CONCRETE ANCHORS TEST LOADS FOR NORMAL-WEIGHT CONCRETE

ANCHOR ANCHOR MINIMUM TENSION TYPE DIAMETER (INCHES) TEST LOAD

*WHEN USED IN LIGHT-WEIGHT CONCRETE, ANCHOR TEST LOADS ARE WAVE REDUCED BY 0.60

*TEST LOADS ARE BASED ON CSA "CODE APPLICATION NOTICE" 2-1916A§§ METHOD 2, 2 TIMES THE MAXIMUM LOAD BUT NOT TO EXCEED 250 LB. OF NOMINAL ANCHOR YIELD STRENGTH.

10. TENSION TESTING SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR-OF-RECORD AND A REPRESENTATIVE OF THE COMPANIES SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY.

11. THE TENSION TEST OF AN ANCHOR SHALL BE CONSIDERED ACCEPTED IF THE ANCHOR IS NOT BROKEN OR BARRED DURING THE APPLICATION OF THE TEST LOAD. A PRACTICAL WAY TO DETECT BARRED MOVEMENT IS TO SPREAD THE WASHER UNDER THE NUT TO BECOME LOOSE.

HOW TO USE THIS PRE-APPROVAL:

1. THE SDR SHALL DETERMINE THE FOLLOWING:

   A. THE MODEL NUMBER OF THE UNIT TO BE USED.

   B. THE ELEVATION OF THE ROOM.

   C. THE ELEVATION OF THE FLOOR WHERE THE UNIT WILL BE INSTALLED.

   D. THE SDR SHALL THEN DETERMINE THE NUT OF 7/8" AND CONSIDER THE APPLICABLE TABLE TO DETERMINE THE TENSION TEST LOAD WHICH CAN BE APPLIED TO THE UNIT.

   E. A PROPER WARNING TO STORE THE HEAVIEST ITEMS ON THE LOWER LEVELS OF THE RACK.

   F. SEER SHALL VERIFY THAT THE CONCRETE PLACED IS PLACED ON THE RACK ATTACHED TO THE FOLLOWING:

   A. UNIT MODEL NUMBER.

   B. NAME OF THE BUILDING IN WHICH IT WILL BE INSTALLED.

   C. HIGHEST FLOOR WHERE IT CAN BE USED.

   D. MAXIMUM WEIGHT OF THE UNIT THAT CAN BE STORED ON THE UNIT.

   E. A PROPER WARNING TO STORE THE HEAVIEST ITEMS ON THE HIGHEST LEVELS OF THE RACK.

   F. SEER SHALL VERIFY THAT THE CONCRETE FLOOR PROVIDES THE REQUIREMENTS OF THE PRE-APPROVAL.

6. SEER SHALL VERIFY THAT THE EXISTING STRUCTURE IS AS ABLE TO TRANSLATE THE LOADS IMPOSED ON IT BY THIS UNIT IN ADDITION TO ALL OTHER LOADS AND FORCES.