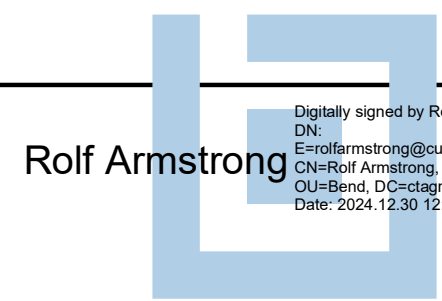
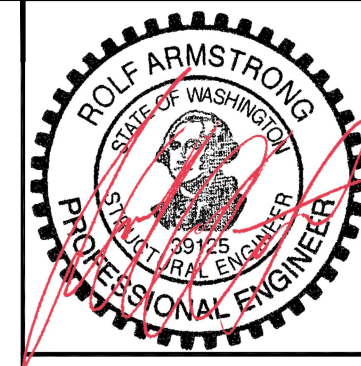




Rolf Armstrong

Digitally signed by Rolf Armstrong
DN:
E=rolf@armstrongengineering.com,
OU=Cushing Terrell, O=H&N,
CN=Rolf Armstrong, DC=WA,
Date: 2024.12.30 12:50:48 -0800



ECLIPSE
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ECLIPSE-ENGINEERING.COM

SO # 162538

PO # 78963

BARNES & NOBLE

PRCTI20250011

3500 S. MERIDIAN STREET - UNIT 800
PUYALLUP, WASHINGTON 98373

PIPP FIXED/MOBILE RIVET
STYLE STEEL STORAGE
SHELVING DETAILS

REVISED	REVISED	REVISED

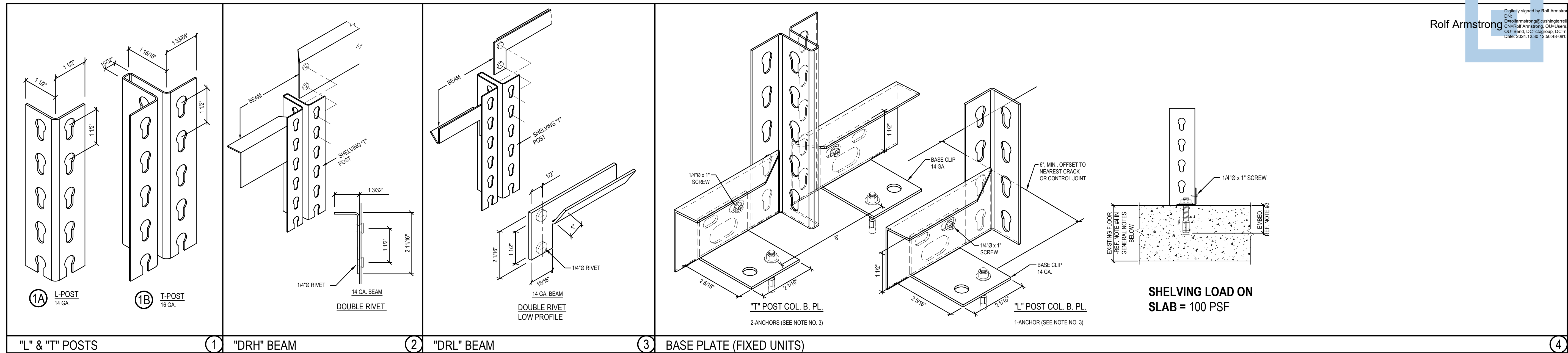
ECLIPSE ENGINEERING

CONTACT INFO:
NICK BURMAN, PE
BEND, OREGON
(541) 647-1460

20243763
12/23/2024

SHEET

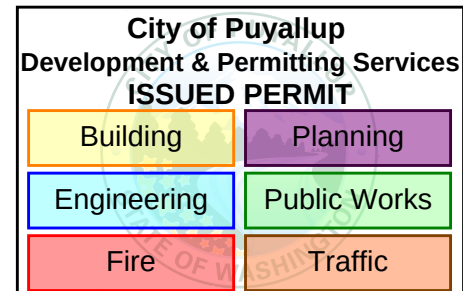
1



Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permittee on site for inspection.



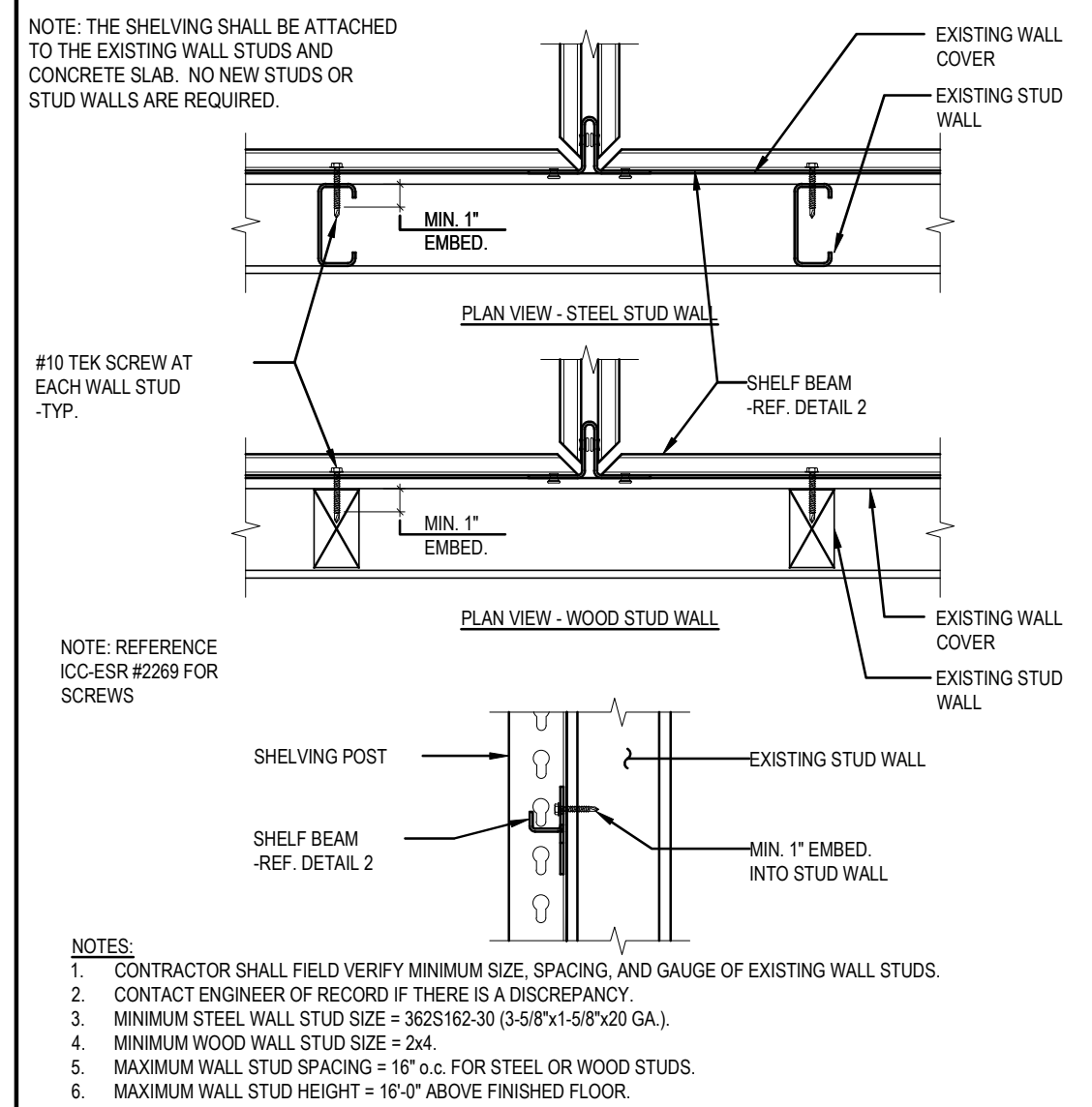
**City of Puyallup
Building
Reviewed
FOR
COMPLIANCE**

SKinnear
01/29/2025
8:47:40 AM



NOT USED

NOT USED



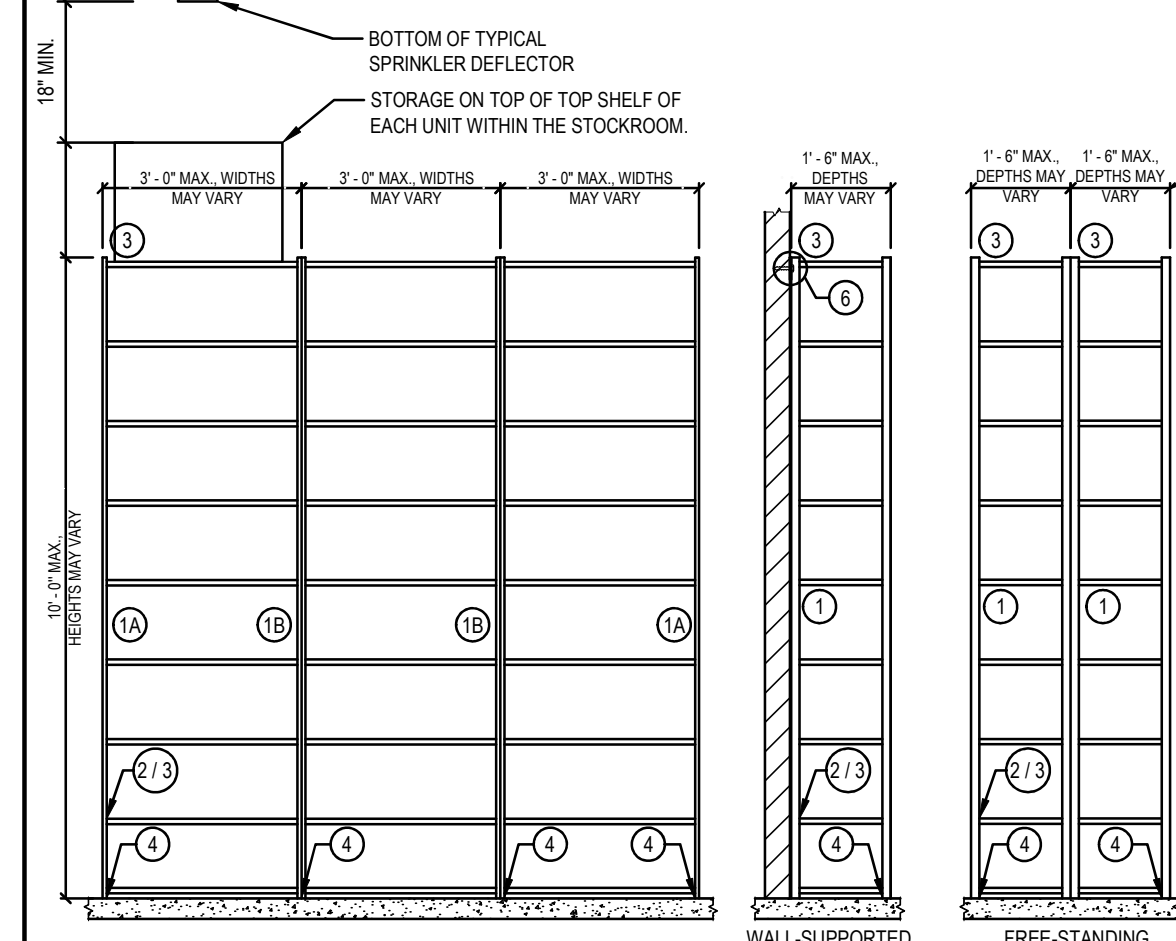
SHELVING UNITS SHALL BE MANUFACTURED BY EITHER:
• WESTERN PACIFIC 300 EAST ARROW HIGHWAY, SAN DIMAS, CALIFORNIA 91773. 800-732-9777 LA-APPROVED FABRICATOR'S LICENSE = "FB01173"
• TENNISCO CORPORATION, 1101 WEST FIRST STREET, DICKSON, TN 37055. 614-446-8000 LA-APPROVED FABRICATOR'S LICENSES = "FB02894", "FB02894-1", & "FB02894-2".

NOTE: FIXED/MOBILE RETAIL SHELVES SHALL BE RESTOCKED BY HAND. DO NOT USE A FORKLIFT OR OTHER MECHANIZED LOADER TO STOCK SHELVES.

INSTALLATION CONSISTS OF THE FOLLOWING SHELVING QUANTITIES:
• TOTAL LENGTH = 270 LINEAR FEET OF SHELVING
• TOTAL AREA = 392 SQUARE FEET OF SHELVING

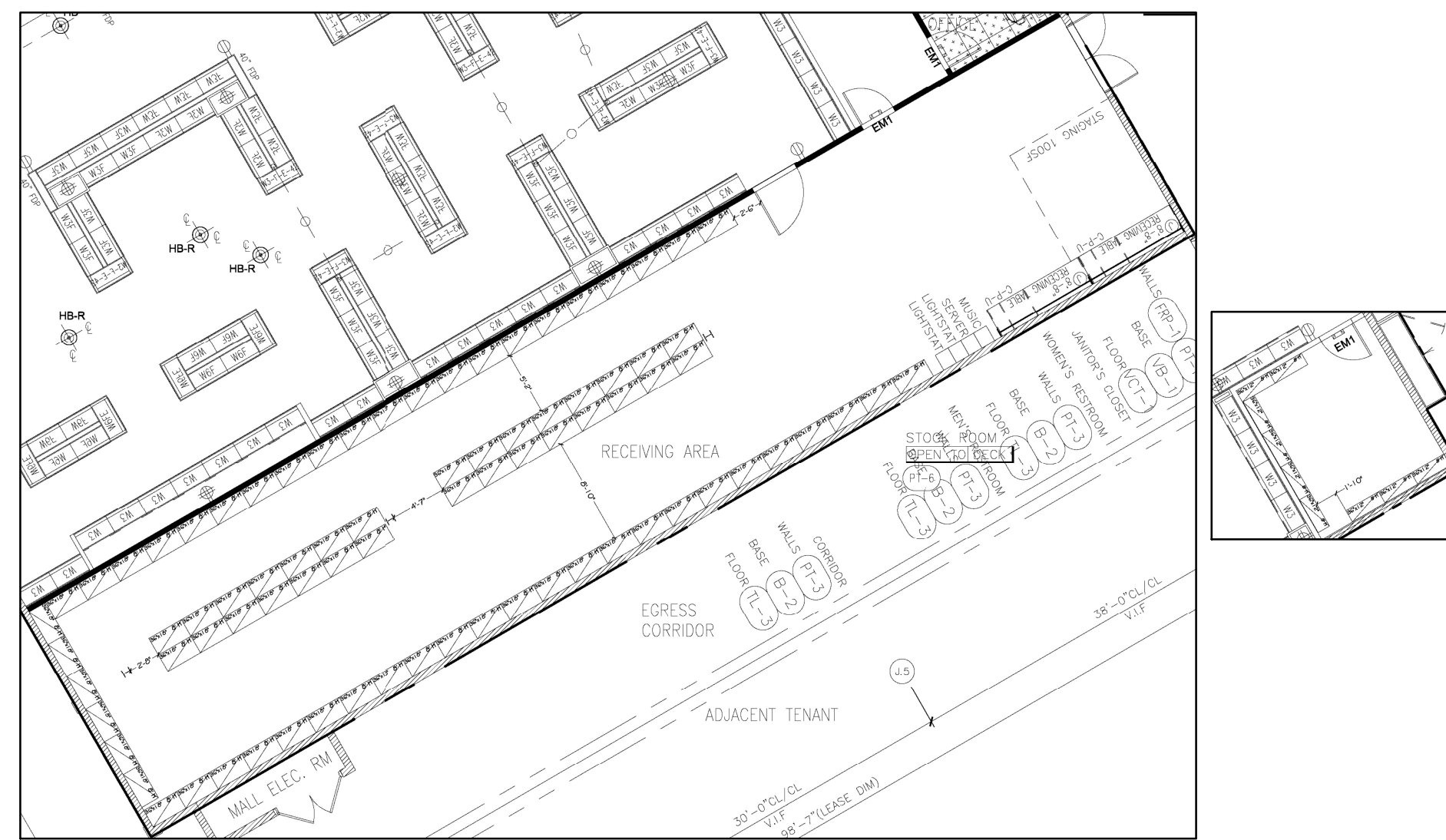
SHELVING UNIT CONFIGURATIONS MAY VARY FROM ELEVATIONS SHOWN BELOW. REFERENCE THE SHELVING UNIT CUT SHEETS IN THE CALCULATION PACKET FOR THE SHELVING UNIT CONFIGURATIONS COVERED BY THIS SUBMITTAL.

FOR BACK-TO-BACK UNITS, ATTACH RACK POSTS W/ 1/4" Ø BOLTS @ 24" O.C. WITH STEEL WASHER AND NUT.



(8) FIXED SHELVING

(9) FIXED SHELVING SIDE VIEWS



PARTIAL FLOOR PLAN & SHELVING RACK LAYOUT

GENERAL NOTES:

- DESIGN OF STEEL STORAGE SHELVING AS SHOWN BY THESE DRAWINGS AND CALCULATIONS ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE 2021 IBC, ASSET 118.8 RM AND 118.8.2022
- STEEL FOR ALL SHAPES IS Fy = 50 KSI EXCEPT AS NOTED
- ALL ANCHORS ARE 3/8" x 10" LONG, MIN. HOLE PUNCH BOLT TYPE A307 OR EQUIVALENT WITH MIN. EMBEDMENT OF 2" (2" 10" NOMINAL) OR APPROVED EQUAL. SPECIAL INSPECTIONS ARE REQUIRED FOR SHELVING EQUAL TO OR TALLER THAN 96" AND LOCATED AT STEES WITH A SEISMIC DESIGN CATEGORY OF D, E, OR F. REFERENCE SCHEDULE 40.0
- EXISTING FLOOR CONSTRUCTION - MIN. 4" THICK CONCRETE SLAB ON GRADE WITH Fy = 5000 PSI AND 800 PSI SOIL BEARING CAPACITY
- ALL SHELVING INSTALLATIONS AND SHELVING MANUFACTURES IN CONFORMITY WITH THIS STANDARD SHALL DISPLAY IN ONE OR MORE CONSPICUOUS LOCATIONS A PERMANENT TRADE. EACH NOT LESS THAN 30 SQUARE INCHES IN AREA SHOWING THE MAXIMUM PERMISSIBLE UNIT LOAD PER LEVEL
- ALL SHELVING SHALL BE IN COMPLIANCE WITH THE RM
- THE CLEAR SPACE BELOW SPRINKLERS SHALL BE A MINIMUM OF 18 INCHES BETWEEN THE TOP OF THE STORED MATERIAL AND THE CEILING SPRINKLER DEFLECTORS
- THE SHELVING RACKS WILL NOT BE OPEN TO THE PUBLIC
- SHELVING UNITS MAXIMUM "OUT OF PLUMBNESS" SHALL BE 0.5 INCH IN 10 FT
- Seismic Importance Factor: R = 1
- Seismic Design Category: D
- Basic Seismic Force-Resisting System: Non-Building Structure, Steel Shelving
- Design Base Shear: V = 102.0
- RDR Redundancy: R = 1.3
- Seismic Response Coefficient: R = 0.227
- Response Modification Factor: R = 4
- Response Amplification Factor: R = 2.5
- Analysis Procedure per ASCE 7-16, Section 15.5.1

STORAGE SHELVING CAPACITIES:
36"X18" UNITS = 60 LBS PER LEVEL
36"X12" UNITS = 40 LBS PER LEVEL

STATEMENT OF SPECIAL INSPECTION				
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	STANDARD KWIK BOLT T22	INSPECTED BY
CONFIRM ANCHOR TYPE		X	HEX HD T22, 3/8" Ø x 3" LONG, MIN. PER ICC-ES ESR-4268 SECTIONS 4.4 & 7.0, FIGURES 2 & 3	SPECIAL INSPECTOR
CONFIRM CONCRETE COMPRESSIVE STRENGTH		X	MINIMUM 2500 PSI	
CONFIRM CONCRETE THICKNESS		X	MINIMUM 4" THICK SLAB OR MINIMUM 3.14" CONCRETE SLAB OVER METAL DECKING	
HOLE DIAMETER & LENGTH		X	7/16" Ø x 3 3/4" LONG, PER ICC-ES ESR-4268 SECTION 4.4, TABLE 1A	SPECIAL INSPECTOR
CLEAN OUT OF HOLE		X	BULBLOW-OUT, PER ICC-ES ESR-4268 SECTIONS 4.3 & 4.4	SPECIAL INSPECTOR
MINIMUM ANCHOR SPACING		X	9" - PER ICC-ES ESR-4268 SECTION 4.4, TABLE 3	SPECIAL INSPECTOR
MINIMUM EDGE DISTANCE		X	2 1/2" - PER ICC-ES ESR-4268 SECTION 4.4, TABLE 3	SPECIAL INSPECTOR
NOMINAL ANCHOR EMBEDMENT		X	2 1/2" - PER ICC-ES ESR-4268 SECTION 4.4, TABLE 1.3	SPECIAL INSPECTOR
TIGHTENING TORQUE		X	30 FT-LBS - PER ICC-ES ESR-4268 SECTIONS 4.3 & 4.4, TABLE 6	SPECIAL INSPECTOR

GENERAL NOTES

NOTE: INSPECTION TO BE COMPLETED BY A 3rd PARTY INSPECTOR