Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 11/19/13

SCRIPTION:

LENGTH: 160.5 HEIGHT: 21.5 / 21.5
NOMINAL. REFER TO PLANS).

ED UTILIZING THE LOADS INDICATED
BY : IBC 09

NFIRM THAT THESE LOADS COMPLY
F THE LOCAL BUILDING DEPARTMENT.

ROOF DEAD LOAD:	2.000	PSF (ROOF PANELS & PURLINS)
COLLATERAL LOAD:	3	PSF
ROOF LIVE LOAD:	20.00	PSF
ROOF SNOW LOAD:	36.78	PSF
GROUND SNOW LOAD:	60	PSF
BASIC WIND SPEED:	110	MPH
SEISMIC ZONE:	C	

IMPORTANCE FACTORS:

WIND LOAD:	1.00
SNOW LOAD	1.0000
SEISMIC LOAD	1.00

LEGACY BUILDING SOLUTIONS(LBS) FOLLOWS THE GUIDELINES OUTLINED IN THE AISC AND MBMA CODES OF STANDARD PRACTICE. LBS STANDARD PRODUCT SPECIFICATIONS, DESIGN, FABRICATION, AND QUALITY CRITERIA SHALL GOVERN ALL WORK UNLESS STIPULATED OTHERWISE IN CONTRACT DOCUMENTS. IN CASE OF DISCREPANCIES BETWEEN LBS STRUCTURAL PLANS AND PLANS FOR OTHER TRADES LBS PLANS SHALL GOVERN.

IT IS THE RESPONSIBILITY OF THE BUILDER TO OBTAIN APPROVALS AND PERMITS FROM ALL GOVERNING AGENCIES AND JURISDICTIONS AS REQUIRED. APPROVAL OF LBS DRAWINGS CONSTITUTES THE ACCEPTANCE OF LBS INTERPRETATION OF THE CONTRACT PURCHASE ORDER. UNLESS SPECIFIC DESIGN CRITERIA CONCERNING INTERFACE DESIGN AND DETAILS ARE FURNISHED AS PART OF THE CONTRACT, LBS DESIGN ASSUMPTIONS SHALL GOVERN.

LBS ENGINEERS ARE NOT PROJECT ENGINEERS OR ENGINEER OF RECORD FOR THE OVERALL PROJECT. LBS ENGINEERING SUPPLY SEALED ENGINEERING DESIGN DATA AND DRAWINGS FOR LBS SUPPLIED MATERIAL AS PART OF THE OVERALL PROJECT FOR USE BY OTHERS TO OBTAIN PERMITS, APPROVALS, AND COORDINATE WITH OTHER TRADES. THE BUILDER OR A/E FIRM ARE RESPONSIBLE FOR THE OVERALL PROJECT COORDINATION INCLUDING COORDINATION WITH APPROPRIATE INSPECTION AND TESTING AGENCIES. ALL INTERFACE AND/OR COMPATIBILITY OF ANY MATERIALS NOT FURNISHED BY LBS ARE TO BE CONSIDERED AND COORDINATED BY THE BUILDER OR A/E FIRM.

GENERAL
THE GENERAL CONTRACTOR AND/OR ERECTOR IS SOLELY RESPONSIBLE FOR ACCURATE, QUALITY WORMANSHIP IN ERECTING THEIS BUILDING IN CONFORMANCE WITH THIS DRAWING. DETAILS REFERENCED IN THIS DRAWING AND INDUSTRY STANDARDS PERTAINING TO PROPER ERECTION INCLUDING THE USE OF TEMPORARY BRACING.

LBS IS NOT RESPONSIBLE FOR ANY ERRORS OMMISSIONS OR DAMAGE INCURED IN THE ERECTION OF OF THE COMPONENTS IN THIS DRAWING, NOR THE INSPECTION OF THE ERECTED COMPONENTS TO DETERMINE THE SAME.

THIS CERTIFICATION AND ENGINEERING SEAL APPLIES ONLY TO PRODUCTS DESIGNED AND FABRICATED BY LBS OR ITS AFFILIATE COMPANIES FOR THE LOADING CONDITIONS DESIGNATED ON THESE DRAWINGS. CONCRETE FOUNDATIONS, STEEL COMPONENTS BY OTHERS AND ERECTION SUPERVISION ARE NOT THE RESPONSIBILITIES OF LBS OR THE CERTIFYING ENGINEER.

ERECTION
THE ERECTOR MUST PROVIDE SAFE WORKING CONDITIONS AND PRACTICES CONFORMING TO ALL SAFETY REGULATIONS. ALL LIFTING DEVICES ARE TO BE DESIGNED TO LIFT THE VARIOUS BUILDING COMPONENTS. SLINGS AND SPREADER BARS ARE TO BE USED TO PREVENT PERMANENT DEFORMATION OF ALL STRUCTURAL COMPONENTS.

ERECTION MUST START AT A BRACED BAY. ERECT AND TEMPORARILY SUPPORT RIGID FRAMES. USE TEMPORARY BRACING AS REQUIRED TO ENSURE STABILITY OF THE FRAMES. INSTALL PURLINS AND CROSS BRACING. PLUMB AND SQUARE RIGID FRAMES IN ACCORDANCE WITH CSA S16-1 AND OSHA 29 CFR PART 1926-SAFETY STANDARD FOR STEEL ERECTION.

ENSURE ALL PURLINS REMAIN PARALLEL AND ALL STRUCTURAL FRAMING MEMBERS ARE PLUMB LEVEL AND ALIGNED.

FIELD MODIFICATIONS
MODIFICATIONS TO THIS BUILDING FROM DETAILS AND INSTRUCTIONS CONTAINED TON THESE DRAWINGS MUST BE APPROVED IN WRITING BY LBS/LMI BUILDING ENGINEERS. THIS INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF ROOF OR WALL COVERING, REMOVING OR MOVING STRUCTURAL PURLINS OR SUPPORTS, REMOVING OR MOVING STRUCTURAL CROSS BRACING OR FLANGE BRACING, OR CORRECTION OF FABRICATION ERRORS, ETC. THE OWNER/ERECTOR SHALL NOT IMPOSE LOADS TO THIS STRUCTURE BEYOND WHAT IS SPECIFIED FOR THEI BUILDING IN THE CONTRACT DOCUMENTS. LBS ACCEPTS NO RESPONSIBILITY FOR THE CONSEQUENCES OF ANY UNAUTHORIZED ADDITIONS, ALTERATIONS, OR ADDED LOADS TO THIS STRUCTURE

IT IS THE RESPONSIBILITY OF THE ERECTOR TO ENSURE THE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPLICABLE REGULATIONS. SEE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS. SEE TABLE 4.1 FOR SUMMARY OF CONNECTIONS. TABLES 8.1 AND 8.2 FOR INSTALLATION REQUIREMENTS AND SECTIONS 9.1-3 FOR DETAIL INSPECTION REQUIREMENTS.

A325 BOLTS IN PRIMARY FRAMING AND BRACING CONNECTIONS MAY BE "SNUG TIGHT" EXCEPT AS FOLLOWS; 1) PRETENSION A325 BOLTS IF BUILDING SUPPORTS A CRANE GREATER THAN 5 TON CAPACITY. 2) PRETENSION A325 BOLTS IF BUILDING SUPPORTS MACHINERY THAT CREATES VIBRATION, IMPACT, OR STRESS REVERSALS ON CONNECTIONS. 3) PRETENSION A325 BOLTS IF LOCATED IN HIGH SEISMIC AREAS. FOR IBC BASED CODES; HIGH SEISMIC IS DESIGN CATEGORY D, E OR F. SEE CODES AND LOADS SECTION OF NOTES.

ALL A490 BOLTS SHALL BE PRE-TENSIONED JOINTS

ALL OTHER HEX BOLTS SHALL CONFORM TO SAE GR.5 OR EQUAL U.N.O.

IN CANADA, ALL A325 AND A490 BOLTS SHALL BE "PRE-TENSIONED", EXCEPT FOR SECONDARY MEMBERS.

SECONDARY MEMBERS ARE ALWAYS SNUG TIGHT, UNLESS INDICATED OTHERWISE IN ERECTION DRAWING DETAILS.

FOUNDATION
FOUNDATION MUST BE LEVEL, SQUARE AND SMOOTH. ANCHOR BOLTS MUST BE PLACED AS SHOWN ON DRAWINGS

ANCHOR BOLTS
ANCHOR DIAMETERS, LENGTHS, AND PROJECTIONS TO BE DETERMINED BY FOUNDATION ENGINEER
ANCHOR BOLT PROJECTIONS BASED ON NO GROUT ARE 2½" MIN TO 4" MAX.

NOVASHIELD II w/ ARMORKOTE
FRU88X-6 15 oz

WEAVE	Woven HDPE scrim using natural FR/UV tapes
COATING	6 MIL AVERAGE EACH SIDE (142 g/m^/side)
WEIGHT	14.8 oz/yd^ (495 g/m^) +/- 5%
THICKNESS	26 MIL (0.67 mm) ASTM D1777
GRAB TENSILE ASTM D-5034-09	WARP 365 lb, 1620 N / WEFT 335 lb, 1487 N
STRIP TENSILE, lb/inch (N/5 cm) ASTM D-5035-11	WARP 275 (2442)/ WEFT 245 (2175)
TONGUE TEAR ASTM D-2261-07a	WARP 94 lb, 417 N/ WEFT 75 LB, 333 N
TRAPEZOIDAL TEAR ASTM D-4533-04	WARP 76 lb, 337 N/ WEFT 70 LB, 310 N
MULLEN BURST ASTM D-3786-09	655 PSI 4512 kPA
ACCELERATED UV WEATHERING[1] ASTM G154-06	>80 % STRENGTH RETENTION AFTER 2000 hrs EXPOSURE @ 0.77 W/m²/nm, OR 1200 hrs EXPOSURE @ 1.35 W/m²/nm
LOW TEMPERATURE BEND ASTM D2136-02(2007)	-65° C

[1]Q.U.V. [A-340 LAMPS]; 8 hrs UV @ 60°C; 4 hrs CONDENSATION @ 50°C [2]1333MJ

FR & UV PERFORMANCE
THIS PRODUCT MEETS THE REQUIREMENTS OF NFPA 701-1989 (LARGE & SMALL SCALE), CAN/ULC S109-M87 (SMALL AND LARGE SCALE), ASTM E84-00a (CLASS 1), UBC31-1, CALIFORNIA FIRE MARSHALL (F-51405).

MATERIAL SPECIFICATIONS
3 PLATE WELDED SECTIONS
A529, A572, A1011 GRADE 55
MISC. STEEL SHAPES
A36 GRADE 36
MISC. STEEL SHAPES
A529, A572, A588, A709, A992 GRADE 50
COLD FORMED MEMBERS
ASTM A1003, A653 GRADE 50
HSS MEMBERS
A500 GRADE B 46 KSI

COATINGS OF STRUCTURAL PLATES ARE DONE HDG TO A NOMINAL COATING. ZINC WEIGHT OF 2.0 oz/ft^ (3.9 mil) OR EQUIVALENT TO ASTM A123
COATINGS OF TUBES ARE HDG TO A NOMINAL COATING. ZINC WEIGHT OF
2.0 oz/ft^ (3.9 mil) OR EQUIVALENT TO ASTM A123

DIAGONAL BRACING
CROSS CABLES - ⅜" TYP U.N.O.

ALUMINUM EXTRUSION ALLOY 6005A T5, HARDNESS ROCKWELL E (83-98), TENSILE STRENGTH (ULTIMATE 38KSI, YIELD 31KSI) AND ELONGATION 7%

ROOF PLAN NOTES
USE OF BOLTS SPECIFIED IN DRAWING DETAILS IS REQUIRED FOR ALL CONNECTIONS
CABLE/ROD AND PURLIN BRACING ARE INTEGRAL PARTS OF THE STRUCTURAL SYSTEM AND SHOULD BE PROPERLY INSTALLED PRIOR TO ERECTION OF ROOF FABRIC AND END PANELS. REMOVAL OR ALTERATION OF ANY BRACING WITHOUT PRIOR AUTHORIZATION FROM LBS ENGINEERING IS PROHIBITED

MATERIAL STORAGE
HDG, ALUMINIZED, AND COLORED MATERIALS ARE SUBJECT TO CORROSION AND DISCOLORATION IF THEY ARE IMPROPERLY STORED. SHORT TERM SITE STORAGE OF STEEL COMPONENTS MAY BE TOLERATED PROVIDED CARE IS TAKEN TO KEEP MATERIALS DRY AT ALL TIMES. IF STEEL IS STORED OUTSIDE PROPER DRAINAGE MUST BE PROVIDED. IN ADDITION STEEL SHOULD NEVER BE STORED IN DIRECT CONTACT WITH GROUND AND SHOULD BE SET ON BLOCKING AT ALL TIMES

FABRIC/LINER NOTES
EXTERIOR FABRIC IS AN INTEGRAL PART OF THE BUILDING ENVELOPE, REMOVAL OR ALTERATION WITHOUT PRIOR AUTHORIZATION IS PROHIBITED. ALL TEARS MUST BE REPAIRED IMMEDIATELY TO AVOID WARRANTY ISSUES

FABRIC SPECIFICATIONS
ALL DURAWEAVE 88X MEMBRANES WILL POSSESS THE FOLLOWING MINIMUM SPECIFICATIONS:

STATE OF MAINE
DWAYNE R. MOENCH
13359
LICENSED
PROFESSIONAL ENGINEER
11-13-13

LEGACY BUILDING SOLUTIONS
www.LegacyBuildingSolutions.com
1-877-265-1325

NEW YARD LLC
120'-0" x 160'-0"
PORTLAND, ME

Legacy Building Solutions
19500 County Rd 142
South Haven, MN 55830
p. 320-259-7126

PATENT PENDING

BUILDING SPECS.

S0.1