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BUILD DIFFERENTLY
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JOIST DESIGN

IMPERIAL UNITS

WARNING: The following drawing is published as guideline only to assist the building designer in the preparation of the building design drawings. The scope of application and adaptation of the drawing is under the responsibility of the building designer.

LOADS

ITEM A.1

DEAD LOAD

ROOF & DECK	= 17.0 psf
MECH. & ELECTRICAL	= 2.0 psf
STRUCTURE	= 3.0 psf
JOISTS	= 2.0 psf
SUSPENDED CEILING	= 1.0 psf
	= 25.0 psf

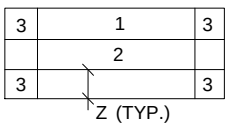
LIVE LOAD

SNOW	= 51.4 psf

ITEM A.2

GROSS UPLIFT	= 20 psf
DEAD LOAD FOR UPLIFT	= 18 psf

GROSS UPLIFT DIAGRAM



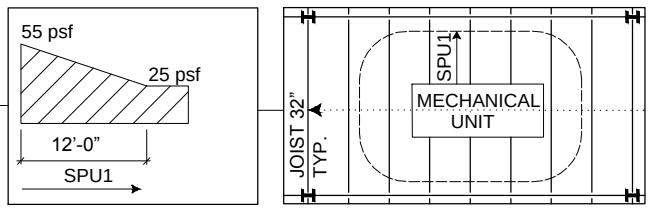
1 = 27.0 psf
2 = 22.0 psf
3 = 30.0 psf
Z = 10'-0"

ITEM A.3

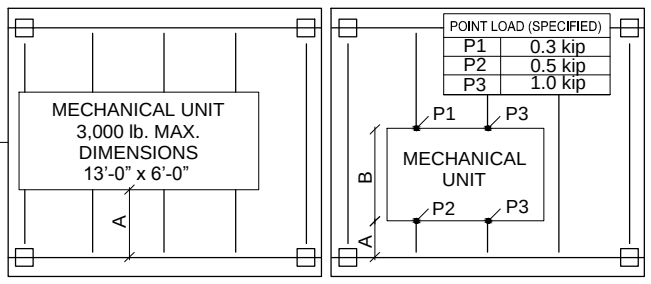
JOIST DESIGNER NOTES

DESIGN ALL ROOF JOISTS FOR A MINIMUM UNFACTORED ADDITIONAL POINT LOAD (DEAD LOAD) OF 200 lb. APPLIED AT ANY TOP OR BOTTOM CHORD PANEL POINT.

ITEM A.4



ITEM A.5



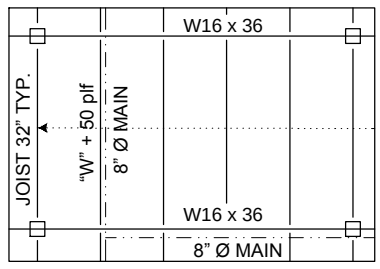
ITEM A.6

FOR PRICING PURPOSES

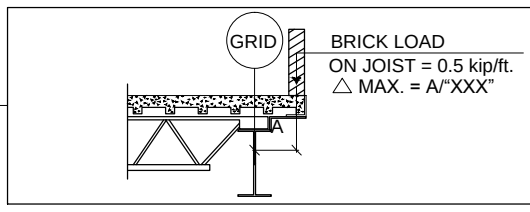
1. 40 SPRINKLER JOISTS ONE 0,5 kip POINT LOAD AT 1ST PANEL POINT (IN 40'-0" SPAN).
2. 20 SPRINKLER JOISTS WITH ADDITIONAL U.D.L. OF 50 plf (IN 35'-0" SPAN)

JOIST DESIGNER NOTE

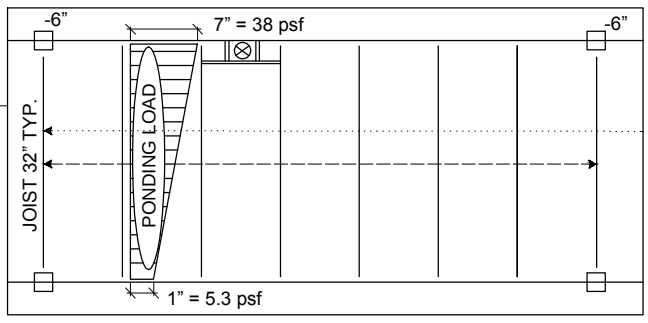
SPRINKLER LINES TO BE HUNG FROM EVERY JOIST AT TOP CHORD PANEL POINTS ONLY U/N.



ITEM A.7



ITEM A.8



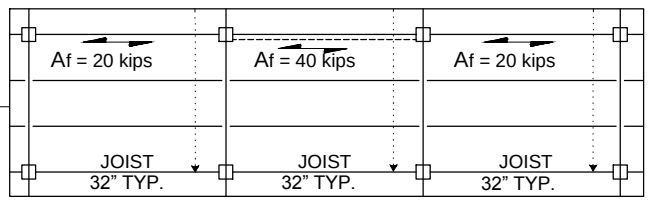
ITEM A.9

CRANE LOADS

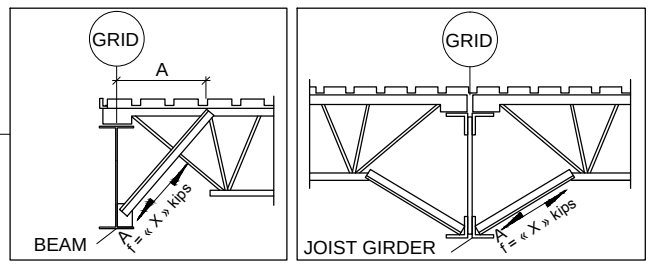
CAPACITY	= 6.0 kips
CRANE WEIGHT	= 7.5 kips
HOIST WEIGHT	= 1.0 kip
MAX. WHEEL LOAD (DYNAMIC)	= 6.8 kips
MIN. WHEELS SPACING	= 6'-0"
IMPACT FACTOR	= 1.25

FORCES

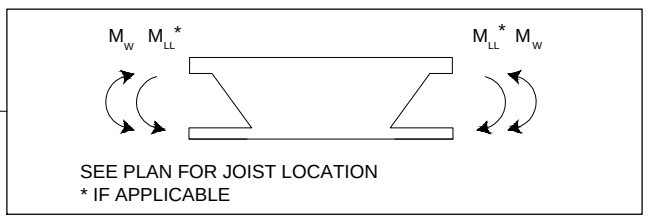
ITEM B.1



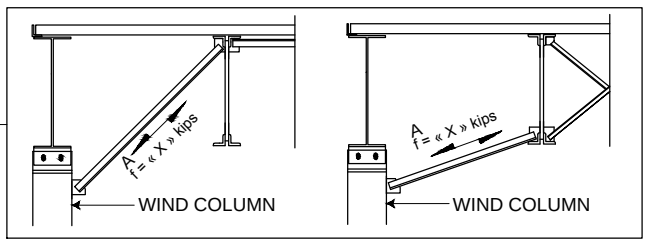
ITEM B.2



ITEM B.3



ITEM B.4



DESIGN CRITERIA

ITEM C.1

LIVE LOAD DEFLECTION

1. ROOF JOISTS = L/240
2. FLOOR JOISTS = L/360

SPECIAL LIMITED DEFLECTION

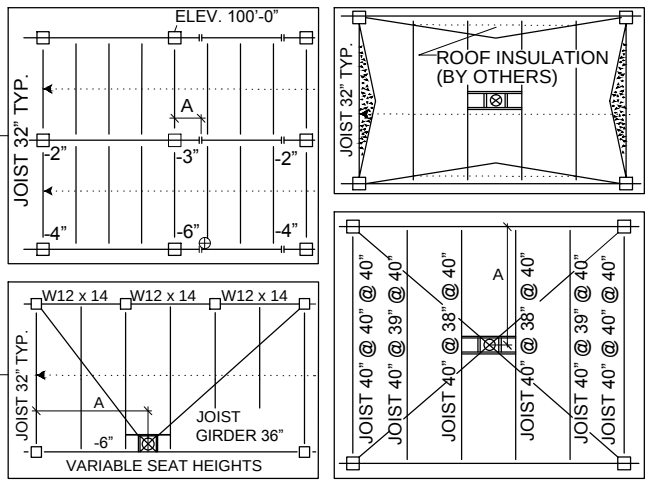
SEE INDICATIONS ON DRAWING BESIDE THE CORRESPONDING JOIST ("X" inches or L/"XXX")

ITEM C.2

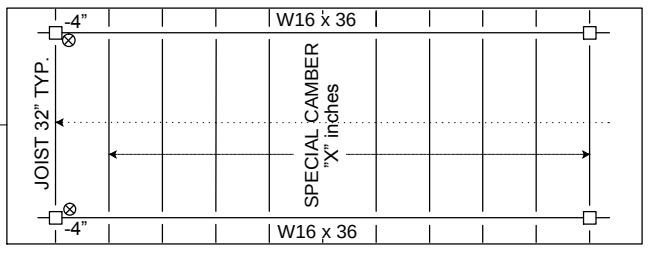
JOIST DESIGNER NOTE

JOISTS IN HATCHED SECTORS INDICATED ON FLOOR PLAN MUST HAVE A MINIMUM INERTIA OF "X" inches^4

ITEM C.3



ITEM C.4

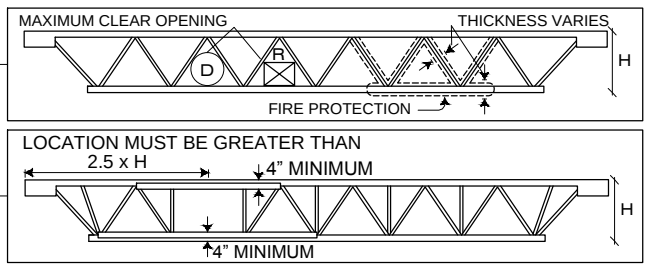


ITEM C.5

FIRE RESISTANCE

1. FLOOR CONSTRUCTION TO COMPLY WITH ULC F818. DECK TO BE STAMPED TO COMPLY WITH ULC U18.19.
2. ROOF CONSTRUCTION TO COMPLY WITH ULC R801.

ITEM C.6



ITEM C.7

GENERAL NOTE

THE MINIMAL THICKNESS OF TOP/BOTTOM CHORD ("X" inches) AND WEB MEMBERS ("Y" inches) MATERIAL MUST BE RESPECTED FOR WEATHER OR CORROSIVE EXPOSURE AND/OR GALVANIZATION PROCESS (IF APPLICABLE).

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