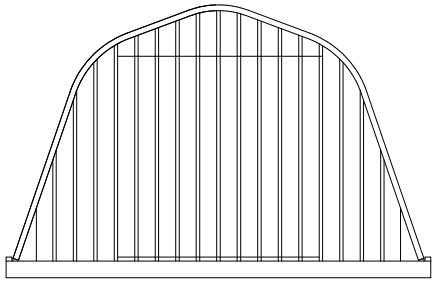
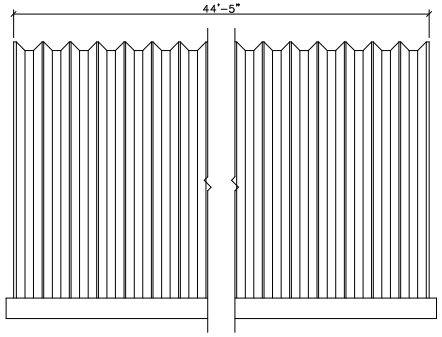
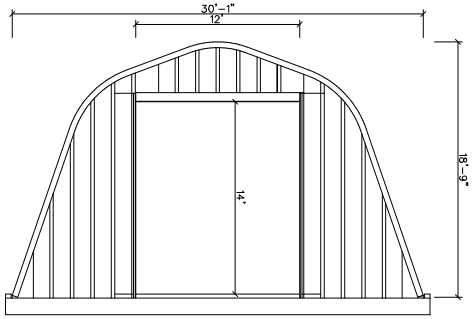


REAR ELEVATION

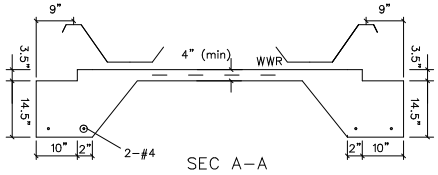


SIDE ELEVATION

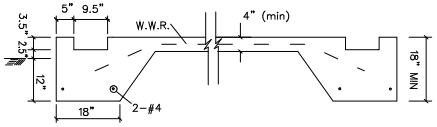


FRONT ELEVATION

OVERHEAD DOOR TO BE DESIGNED AND SUPPLIED BY OTHERS



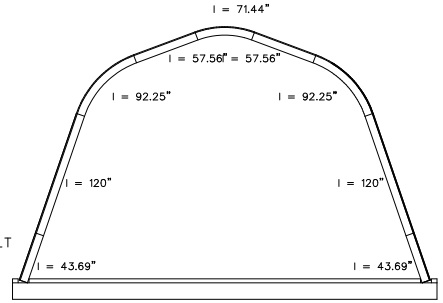
SEC A–A



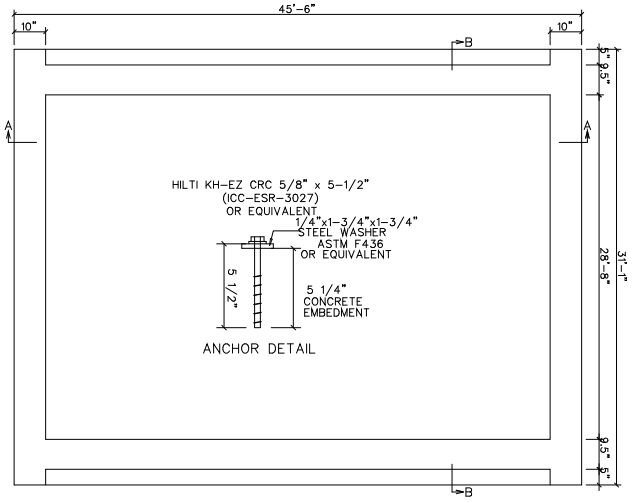
SEC B–B

WARNING: DO NOT REMOVE OR REDUCE THE CONCRETE FLOOR OR THE REINFORCING STEEL, AND/OR RAISE THE TOPS OF THE FOOTERS ABOVE THE FLOOR OR BUILDING FAILURE MAY RESULT

Minimum Concrete Cover:
(a) Concrete Cast against earth: 3"
(b) Concrete exposed to earth or weather:
No. 6 through No. 10 bars: 2"
No. 5 bar and smaller: 1.5"
(c) Concrete not exposed to earth or weather: 0.75"



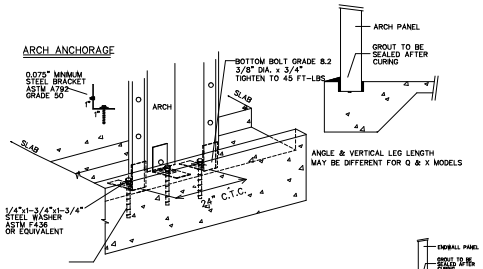
ARCH PROFILE



ANCHOR DETAIL

FOUNDATION PLAN

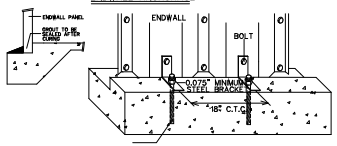
ARCH ANCHORAGE



FIRST ANCHOR BOLT LOCATION FROM END OF FOUNDATION:
* 2.5" WITH NO WALL OR MANUFACTURER'S CLADDED ENDWALL
* 21" WITH MANUFACTURER'S CORRUGATED ENDWALL

ARCHES AND MANUFACTURER'S ENDWALLS MUST BE GROUTED INTO FOUNDATION ON BOTH SIDES OF PANELS.

ENDWALL ANCHORAGE



ANCHOR LOCATIONS =
* SOLID ENDWALL = 9" FROM BUILDING CENTERLINE, THEN 18" C.T.C.
* OPENING ENDWALL = 2" FROM DOOR FRAME OPENING, THEN 18" C.T.C.

GENERAL NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM WITH THE REQUIREMENTS OF THE LATEST REVISION OF THE INTERNATIONAL BUILDING CODE 2006. DESIGN ACCORDING TO NASPEC-01, NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AND WITH ANSI/ASCE 7-05.
2. NO LOADS OTHER THAN THOSE GIVEN UNDER "DESIGN DATA" BELOW SHALL BE IMPOSED ON THE "STRUCTURE"
3. SPECIFIC NOTES AND DETAILS SHOWN ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THE BUILDING MANUAL SUPPLIED.
4. THE BUILDING, INCLUDING THE FOUNDATION, MUST BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE DRAWING AND ERECTION INSTRUCTIONS. ANY DEVIATION, UNLESS APPROVED BY US IN WRITING, SHALL NULLIFY OUR CERTIFICATE AND SEAL AND SHALL BE THE SOLE RESPONSIBILITY OF THE ERECTOR.
5. A PROFESSIONAL ENGINEER SHOULD BE RETAINED WHERE SITE INSPECTIONS ARE WARRANTED.
6. NO ARCH PANEL MAY BE CUT OR MODIFIED UNLESS IT IS TO ACCOMMODATE AN ACCESSORY PROVIDED BY THE MANUFACTURER IN ACCORDANCE WITH ITS INSTRUCTIONS AND/OR THIS DRAWING.
7. MINIMUM SEPARATION FROM THIS BUILDING TO ANY TALLER BUILDING MUST BE THE SMALLER OF 20 FEET AND 6 TIMES THE HEIGHT DIFFERENCE.
8. IF SEALED BY AN ENGINEER, THIS DRAWING IS FOR PERMIT APPLICATION. OTHERWISE IT IS A DRAFT AND NOT FOR CONSTRUCTION.

FOUNDATION NOTES

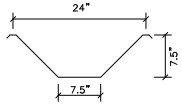
NOTE: THE FOUNDATION ON THE DRAWING SPECIFIES THE MINIMUM REQUIREMENTS. LOCAL BUILDING CODE AND SITE CONDITIONS MAY REQUIRE A STRONGER FOUNDATION, WHICH MUST BE DESIGNED BY A LOCAL ENGINEER.

1. THE FOUNDATION SHALL BE FOUNDED ON NATURAL UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 1500 psf. THIS SHALL BE DESIGNED TO FULLY RESIST ALL ROTATION AT THE BASE OF THE ARCH.
2. SLAB ON GRADE SHALL BE PLACED ON WELL COMPACTED SOIL CAPABLE OF SUSTAINING 1500 psf WITHOUT APPRECIABLE SETTLEMENT.

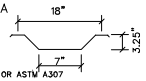
DESIGN DATA (MATERIALS)

1. CONCRETE F'c = 2500 PSI @ 28 DAYS, ACI
2. REINFORCING STEEL GRADE 40, Fy = 40 KSI, ASTM A615
3. W.W.R. Fy = 65 KSI, ASTM A185.
4. W.W.R. 6 x 6 – W1.4 x W1.4

ARCH DATA



ENDWALL DATA



BOLTS: SAE GRADE 2 OR ASTM A307
ARCH STEEL THICKNESS – SEE ARCH PROFILE
ENDWALL STEEL THICKNESS = 0.03 in.

GALVALUME SHEET STEEL
STRUCTURAL QUALITY ASTM SPECIFICATION A792-03
55% ALUMINUM-ZINC ALLOY (HOT DIP COATING)
ASTM A792 GRADE 50A
50 KSI MINIMUM YIELD
65 KSI MINIMUM TENSILE
HSS SECTIONS SHALL CONFORM TO:
ASTM A500 GRADE B (Fy = 46 ksi)
W SECTIONS SHALL CONFORM TO:
ASTM A992 GRADE 50 (Fy = 50 ksi)
OTHER SECTIONS SHALL CONFORM TO:
ASTM A36 (Fy = 36 ksi)

ARCH DESIGN DATA IN ACCORDANCE WITH ANSI/ASCE 7-05:
Lo: ROOF LIVE LOAD (PSF) = 0
Pg: GROUND SNOW LOAD (PSF) = 0
Ce: EXPOSURE FACTOR = 1.0
Ct: THERMAL FACTOR = 1.0
IMPORTANCE FACTOR (SNOW) = 0.8
CATEGORY 1/AGRICULTURAL BUILDING
Pnet: COMPONENT WIND PRESSURE (PSF) = +/– 0
V : BASIC WIND SPEED (MPH) = 0
Kh: VELOCITY PRESSURE EXPOSURE = 0.85
GCpi: PRODUCT OF INTERNAL PRESSURE COEFFICIENT AND GUST-EFFECT FACTOR = +/– 0.18
Kd: WIND DIRECTIONALITY FACTOR = 0.85
Kzt: TOPOGRAPHIC FACTOR = 1.0
IMPORTANCE FACTOR (WIND) = 0.87
WIND EXPOSURE CATEGORY = C
SEISMIC DESIGN CATEGORY = D2

LEGAL NOTE
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REVISIONS:

ENGINEER'S SEAL:

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220 Chrysler Drive, Brampton, Ontario, Canada, L6S 6B8, Phone: (905) 790-8500

SCALE: N.T.S.	APPROVED BY:	
DATE: 2024-10-28	CHECKED BY:	
PROJECT:		
MODEL: X30-19	DWG:	