Guidelines for Design

DEAN
STEEL BUILDINGS, INC.

Creative Ideas for Tomorrow's Buildings

Investors, architects, and planners across the country are rediscovering and taking advantage of the outstanding benefits system building has to offer. Metal building systems account for more than 69% of all low rise non-commercial structures of up to 150,000 square feet, more than 300 million square feet annually. In any one year of this decade, metal building systems will account for more than $7 billion of in-place construction. Their 16% annual growth rate is double that of ordinary construction.

The popularity of metal building systems can be explained in the many dollar values not found in other structures. The more significant benefits include:

1. *Reasonable Initial Cost.* Metal buildings generally cost less than competing construction systems because in-plant technology and production reduce on-site labor. Component parts for the complete system can be delivered and organized at the jobsite and quickly erected.

2. *Faster Occupancy*. On the average, a metal building system can be completed in approximately two-thirds the time required for conventional construction. This results from the application of factory-produced component parts and pre-painted wall and roof panels.

3. *Attractive Appearance.* The appearance of metal building systems can easily be enhanced with the application of wood, stone, brick, or glass storefront. Metal building systems can achieve a striking appearance that will aesthetically blend with the building's surroundings.

4. *Lower Energy Bills.* A properly insulated metal building can significantly reduce heating and cooling costs. Insulated roof and wall systems can assure predetermined thermal efficiencies.

5. *Reduce Maintenance.* Long life materials and finishes on wall and roof panels reduce maintenance. Metal buildings eliminate a number of maintenance problems such as structural deterioration, cracking, damp rot, and insect damage.

6. *Flexibility.* Typically a metal building can be enlarged by removing the endwalls, erecting new framework, and adding matching wall and roof cover. In most cases, the original endwall panels can be reused.

7. *Cost Predictability*. Through Dean's quality control and product assurance methods the cost of materials can be accurately determined. The ease by which costs can be predicted and controlled from the outset has promoted the design team concept and stimulated design/building construction.

This pictorial display of metal buildings contained within is intended to present you with a creative idea of the limitless possibilities for beauty and variety. Dean's building systems can meet the challenges of rational construction practices with a creative blend of practicality and aesthetics, restricted by only one limitation – the imagination.

HANGARS

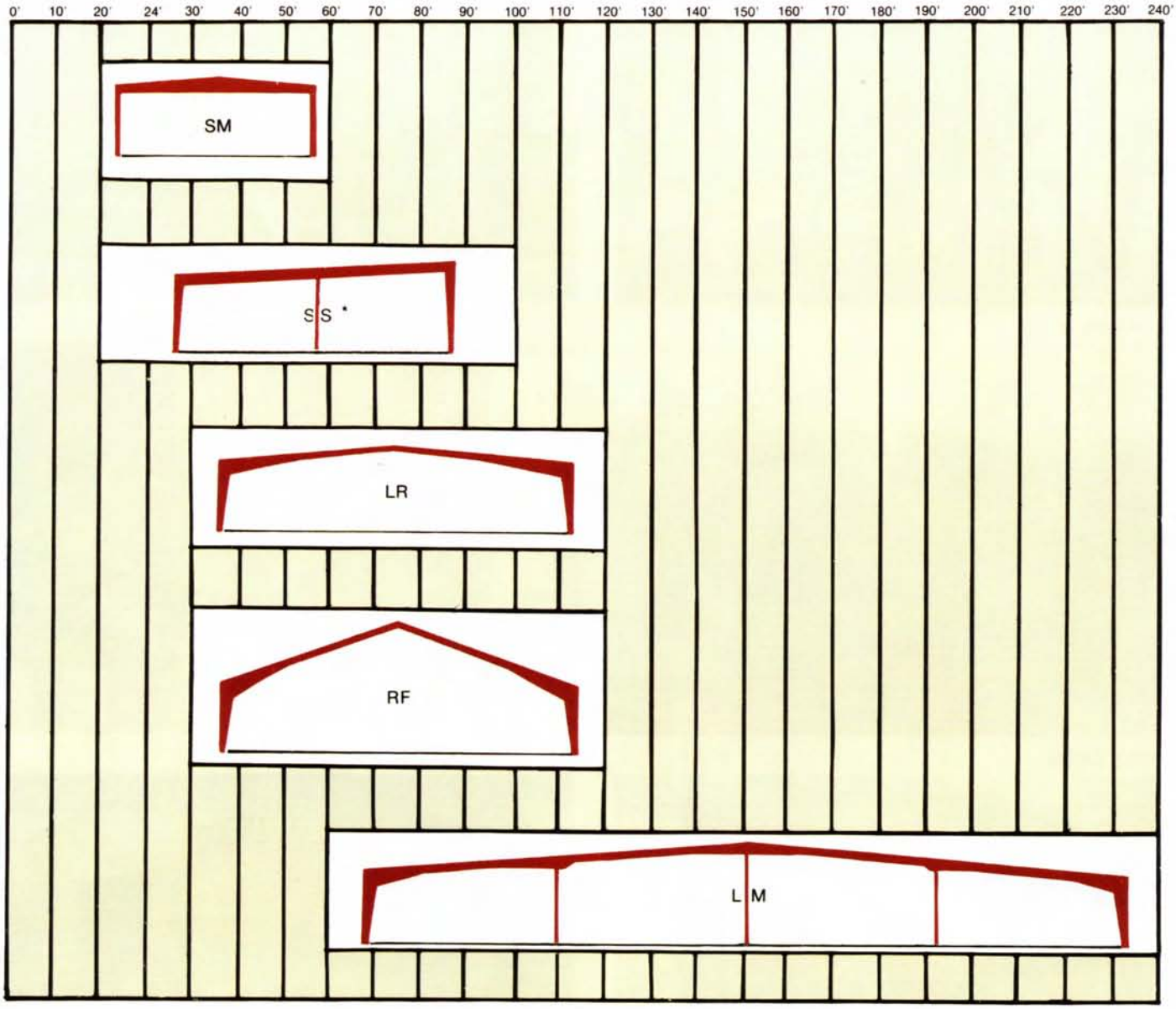

DOLLAR GENERAL


FPSI


HUGHES SUPPLY, INC.

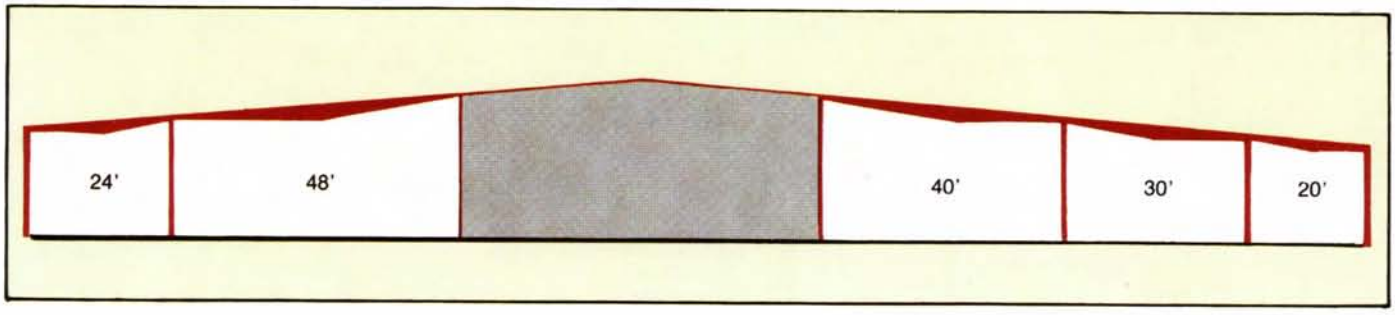

LESCO

AVAILABLE BUILDING WIDTHS



*INTERIOR COLUMN ON 70' THRU 100' SPANS ONLY.

WING UNITS



Endwall Column Spacing

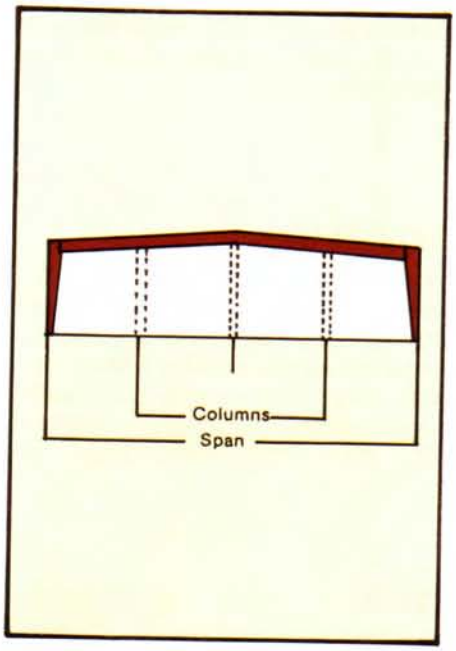
The chart shown below illustrates standard endwall column spacing on Dean buildings having bearing frame or rigid frame endwalls.

Standard endwall columns are hot rolled mill shapes to provide for maximum strength and stability.

The column spacing chosen allows for adequate door and window placement in most instances.

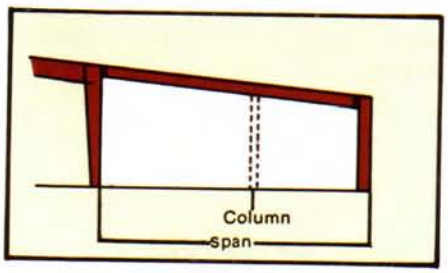
The chart dimensions shown are measured from the building girt line to the centerline of the first interior column or from the centerline of the interior column to the centerline of an adjacent interior column.

An alternate cold formed endwall is available on request. Endwall columns are 8' CEE sections with spacings less than those shown in the chart.



Span	Endwall Column Spacing					
20'	10'-0"	10'-0"				
24'	12'-0"	12'-0"				
30'	15'-0"	15'-0"				
40'	20'-0"	20'-0"				
50'	15'-0"	20'-0"	15'-0"			
60'	20'-0"	20'-0"	20'-0"			
70'	15'-0"	20'-0"	20'-0"	15'-0"		
80'	20'-0"	20'-0"	20'-0"	20'-0"		
90'	15'-0"	20'-0"	20'-0"	20'-0"	15'-0"	
100'	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	
110'	15'-0"	20'-0"	20'-0"	20'-0"	20'-0"	15'-0"
120'	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"	20'-0"

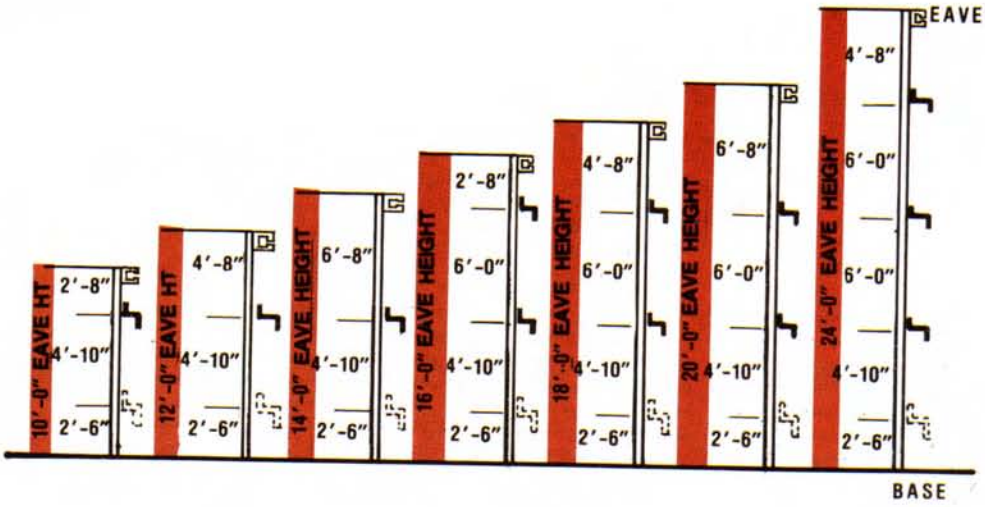
Note: All Endwalls will be quoted as Bypass Girts (most economical) unless requested as Insert on P.O./Quote Request.



Span	Wing Unit Column Spacing		
20'	N/A	N/A	
24'	15'-0"	9'-0"	
30'	20'-0"	10'-0"	
40'	20'-0"	20'-0"	
48'	20'-0"	20'-0"	8'-0"

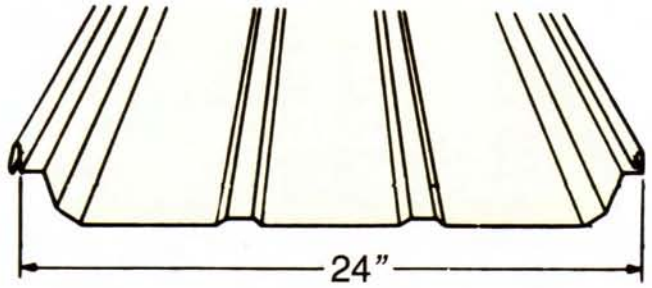
Girt Spacing

All girts are 8' ZEE sections having stiffened flanges. They are roll formed from 12, 14, 15 and 16 gage material. Buildings are designed to have either flush or bypass girt systems. *Buildings designed for 80, 90 or 100 mph wind loads do not have a girt located at 2'-6" as shown on the chart at the right.



PANELS

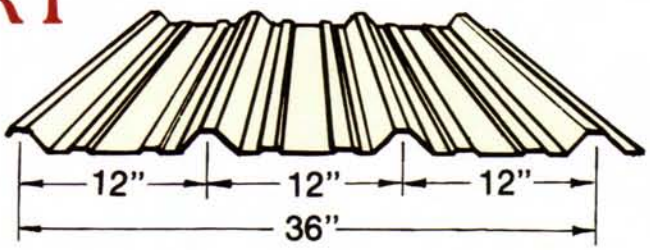
PS



Pro Seam

An economical 3"high standing seam roof system which eliminates the majority of the through-the-panel fasteners. This is accomplished by utilizing either a fixed or articulating clip that floats up to 2 1/2". Available with Galvalume™ 20 year perforation guarantee, UL 90, various gauges, 24' net coverage and selected colors.

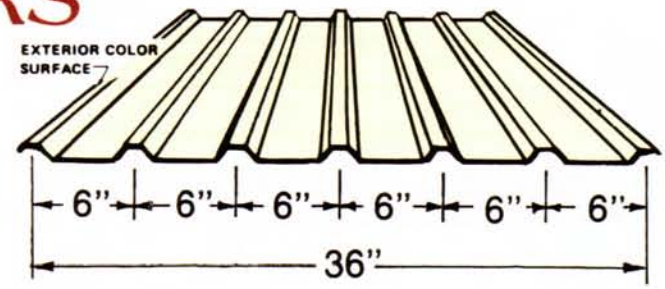
RT



Rib Twelve

80,000 psi roof or wall panel. 1-1/4" deep ribs 12" on center with two 3/16" deep intermediate stiffeners, 36" net coverage. The Rib Twelve Galvalume™ panel has the purlin bearing leg. Eight standard colors in 26 gauge, also **Dade County approved** panels, 24 gauge in selected colors.

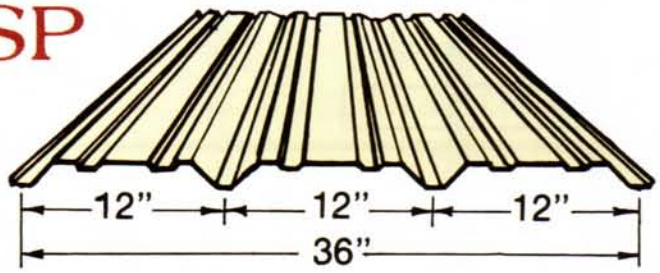
RS



Rib Six

26 gauge, 80,000 psi roof or wall panel. 3/4" deep ribs 6" on center, 36" net coverage. This versatile panel has a clean, smooth appearance and can be used as soffits, liners, or floor deck. (Limited colors & availability).

SP



Shadow Panel

26 gauge, 80,000 psi wall panel. 1 1/4" deep recesses 12" on center with intermediate accent lines, 36"net coverage. The panel does not provide diaphragm action required in some building systems.

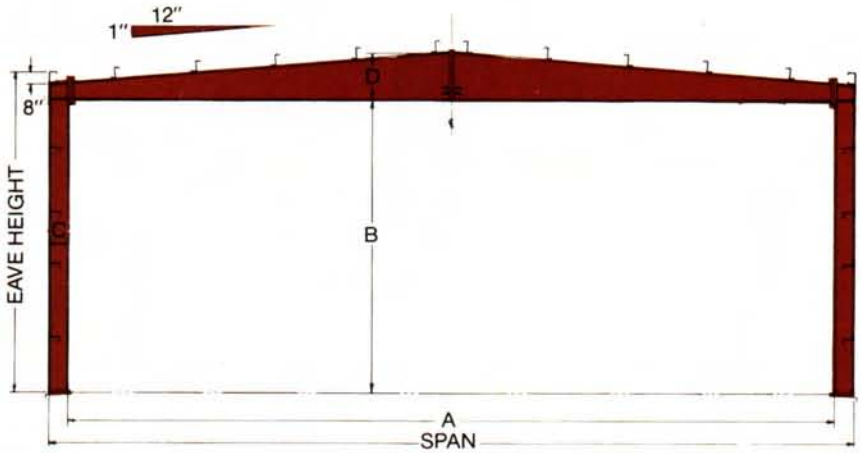
ENGINEERING PROPERTIES OF PANELS

	GAGE	STEEL YIELD	STEEL THK.	TOTAL THK.	GIRTH	WEIGHT	TOP OR INSIDE FLAT IN COMPRESSION		BOTTOM OR OUTSIDE FLAT IN COMPRESSION		
		(K.S.I.)	(IN.)	(IN.)	(IN.)	(#/FT.²)	I_x (IN.⁴/FT.)	S_x (IN.³/FT.)	I_x (IN.⁴/FT.)	S_x (IN.³/FT.)	F_b (K.S.I.)
RIB-6	26	80.0	0.0198	0.0217	41.5	1.045	0.0222	0.0382	0.0158	0.0366	48.0
RIB-12	26	80.0	0.0198	0.0217	41.5	1.045	0.0424	0.0421	0.0413	0.0448	48.0
SHADOW PANEL	26	80.0	0.0198	0.0217	41.5	1.045	0.0413	0.0448	0.0424	0.0421	48.0
PRO-SEAM	26	50.0	0.0198	0.0217	30.0	1.13	0.2714	0.1191	0.1020	0.0648	30.0
PRO-SEAM	24	50.0	0.0258	0.0276	30.0	1.44	0.3559	0.1490	0.1453	0.0961	30.0
PRO-SEAM	22	50.0	0.0318	0.0355	30.0	1.75	0.4367	0.1825	0.1920	0.1312	30.0

SM

Space Maker

The Space maker building system features insert girts in the side walls. This design allows maximum utilization of the interior space. The interior rigid frame has a constant depth column. The rafter will have a bottom flange that is either parallel to the floor or sloped upwards, depending upon building span.



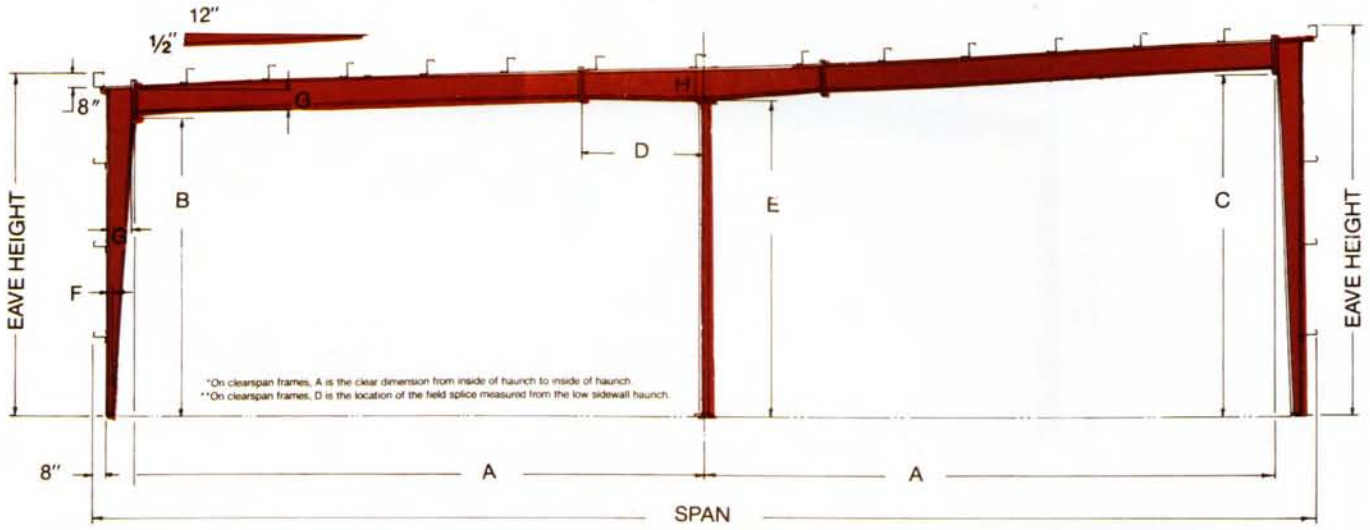
BUILDING		A	B	C	D
SPAN	EAVE HEIGHT				
SM 20'	10' - 0"	18' - 8"	8' - 6"	0' - 8"	1' - 8"
	12' - 0"	18' - 8"	10' - 6"	0' - 8"	1' - 8"
	14' - 0"	18' - 6"	12' - 6"	0' - 9"	1' - 8"
	16' - 0"	18' - 6"	14' - 6"	0' - 9"	1' - 8"
	18' - 0"	18' - 6"	16' - 6"	0' - 9"	1' - 8"
SM 24'	10' - 0"	22' - 8"	8' - 6"	0' - 8"	1' - 10"
	12' - 0"	22' - 8"	10' - 6"	0' - 8"	1' - 10"
	14' - 0"	22' - 6"	12' - 6"	0' - 9"	1' - 10"
	16' - 0"	22' - 6"	14' - 6"	0' - 9"	1' - 10"
	18' - 0"	22' - 6"	16' - 6"	0' - 9"	1' - 10"
SM 30'	10' - 0"	28' - 8"	8' - 6"	0' - 8"	2' - 0"
	12' - 0"	28' - 8"	10' - 6"	0' - 8"	2' - 0"
	14' - 0"	28' - 6"	12' - 6"	0' - 9"	2' - 0"
	16' - 0"	28' - 6"	14' - 6"	0' - 9"	2' - 0"
	18' - 0"	28' - 6"	16' - 6"	0' - 9"	2' - 0"
SM 40'	10' - 0"	38' - 4"	8' - 6"	0' - 10"	2' - 6"
	12' - 0"	38' - 4"	10' - 6"	0' - 10"	2' - 6"
	14' - 0"	38' - 0"	12' - 6"	1' - 0"	2' - 6"
	16' - 0"	38' - 0"	14' - 6"	1' - 0"	2' - 6"
	18' - 0"	38' - 0"	16' - 6"	1' - 0"	2' - 6"
	20' - 0"	38' - 0"	18' - 6"	1' - 0"	2' - 6"
SM 50'	10' - 0"	48' - 4"	8' - 5"	0' - 10"	2' - 11"
	12' - 0"	48' - 4"	10' - 5"	0' - 10"	2' - 11"
	14' - 0"	48' - 4"	12' - 5"	0' - 10"	2' - 11"
	16' - 0"	48' - 0"	14' - 5"	1' - 0"	2' - 11"
	18' - 0"	48' - 0"	16' - 5"	1' - 0"	2' - 11"
	20' - 0"	48' - 0"	18' - 5"	1' - 0"	2' - 11"
	24' - 0"	58' - 4"	22' - 5"	1' - 0"	2' - 11"
SM 60'	10' - 0"	58' - 4"	8' - 4"	0' - 10"	3' - 5"
	12' - 0"	58' - 4"	10' - 4"	0' - 10"	3' - 5"
	14' - 0"	58' - 4"	12' - 4"	0' - 10"	3' - 5"
	16' - 0"	58' - 0"	14' - 4"	1' - 0"	3' - 5"
	20' - 0"	58' - 0"	18' - 4"	1' - 0"	3' - 5"
	24' - 0"	58' - 0"	22' - 4"	1' - 0"	3' - 5"

PLEASE NOTE D DIMENSION IS BASED ON A LOWER FLANGE PARALLEL TO THE FLOOR AS SHOWN. ON SOME BUILDINGS THIS FLANGE IS TAPERED RESULTING IN A D DIMENSION LESS THAN TABULATED.

CLEARANCE DIMENSIONS ARE APPROXIMATE AND MAY CHANGE WITH LOADING CONDITION AND BAY SPACING.

SS Single Slope

The single slope building system has a distinctive 1/2:12 roof pitch that achieves a striking appearance for an office complex or shopping center. The SS system ranges from 20' to 60' without the use of interior columns and from 60' to 100' with one interior column. All spans use bypass girts unless requested as Insert.



SPAN	EAVE HEIGHT LOW	EAVE HEIGHT HIGH	A *	B	C	D **	E	F	G	H
SS 20'	10' - 0"	10' - 10"	18' - 8"	8' - 8"	9' - 11"	NA	10' - 5"	0' - 8"	0' - 8"	0' - 8"
	12' - 0"	12' - 10"	18' - 8"	10' - 8"	11' - 11"	NA	12' - 5"	0' - 8"	0' - 8"	0' - 8"
	14' - 0"	14' - 10"	18' - 8"	12' - 8"	13' - 11"	NA	14' - 5"	0' - 8"	0' - 8"	0' - 8"
SS 24'	10' - 0"	11' - 0"	22' - 8"	8' - 6"	9' - 9"	NA	10' - 6"	0' - 8"	0' - 8"	0' - 8"
	12' - 0"	13' - 0"	22' - 8"	10' - 6"	11' - 9"	NA	12' - 6"	0' - 8"	0' - 8"	0' - 8"
	14' - 0"	15' - 0"	22' - 8"	12' - 6"	13' - 9"	NA	14' - 6"	0' - 8"	0' - 8"	0' - 8"
SS 30'	10' - 0"	11' - 3"	28' - 8"	8' - 6"	9' - 9"	NA	10' - 7"	0' - 8"	1' - 0"	1' - 0"
	12' - 0"	13' - 3"	28' - 8"	10' - 6"	11' - 9"	NA	12' - 7"	0' - 8"	1' - 0"	1' - 0"
	14' - 0"	15' - 3"	28' - 8"	12' - 6"	13' - 9"	NA	14' - 7"	0' - 8"	1' - 0"	1' - 0"
SS 40'	10' - 0"	11' - 8"	36' - 8"	8' - 5"	9' - 11"	NA	10' - 10"	0' - 8"	1' - 0"	1' - 0"
	12' - 0"	13' - 8"	36' - 8"	10' - 5"	11' - 11"	NA	12' - 10"	0' - 8"	1' - 0"	1' - 0"
	14' - 0"	15' - 8"	36' - 8"	12' - 5"	13' - 11"	NA	14' - 10"	0' - 8"	1' - 0"	1' - 0"
	16' - 0"	17' - 8"	36' - 8"	14' - 5"	15' - 11"	NA	16' - 10"	0' - 8"	1' - 0"	1' - 0"
	20' - 0"	21' - 8"	36' - 8"	18' - 5"	19' - 11"	NA	20' - 10"	0' - 8"	1' - 0"	1' - 0"
SS 50'	10' - 0"	12' - 1"	45' - 8"	7' - 11"	9' - 10"	22' - 10"	11' - 1"	0' - 8"	1' - 6"	1' - 6"
	12' - 0"	14' - 1"	45' - 8"	9' - 11"	11' - 10"	22' - 10"	13' - 1"	0' - 8"	1' - 6"	1' - 6"
	14' - 0"	16' - 1"	45' - 8"	11' - 11"	13' - 10"	22' - 10"	15' - 1"	0' - 8"	1' - 6"	1' - 6"
	16' - 0"	18' - 1"	45' - 8"	13' - 11"	15' - 10"	22' - 10"	17' - 1"	0' - 8"	1' - 6"	1' - 6"
	20' - 0"	22' - 1"	45' - 8"	17' - 11"	19' - 10"	22' - 10"	21' - 1"	0' - 8"	1' - 6"	1' - 6"
SS 60'	12' - 0"	14' - 6"	55' - 0"	9' - 7"	11' - 11"	27' - 6"	13' - 3	0' - 8"	1' - 10"	1' - 10"
	14' - 0"	16' - 6"	55' - 0"	11' - 7"	13' - 11"	27' - 6"	15' - 3"	0' - 8"	1' - 10"	1' - 10"
	16' - 0"	18' - 6"	55' - 0"	13' - 7"	15' - 11"	27' - 6"	17' - 3"	0' - 8"	1' - 10"	1' - 10"
	20' - 0"	22' - 6"	55' - 0"	17' - 7"	19' - 11"	27' - 6"	21' - 3"	0' - 8"	1' - 10"	1' - 10"
SS1 60'	10' - 0"	12' - 6"	28' - 1"	8' - 2"	10' - 6"	6' - 0"	9' - 1"	0' - 8"	1' - 3"	1' - 6"
	12' - 0"	14' - 6"	28' - 1"	10' - 2"	12' - 6"	6' - 0"	11' - 1"	0' - 8"	1' - 3"	1' - 6"
	14' - 0"	16' - 6"	28' - 1"	12' - 2"	14' - 6"	6' - 0"	13' - 1"	0' - 8"	1' - 3"	1' - 6"
	16' - 0"	18' - 6"	28' - 1"	14' - 2"	16' - 6"	6' - 0"	15' - 1"	0' - 8"	1' - 3"	1' - 6"
	20' - 0"	22' - 6"	28' - 1"	18' - 2"	20' - 6"	6' - 0"	19' - 1"	0' - 8"	1' - 3"	1' - 6"
SS1 70'	10' - 0"	12' - 11"	33' - 1"	8' - 2"	11' - 0"	12' - 0"	9' - 1"	0' - 8"	1' - 3"	1' - 9"
	12' - 0"	14' - 11"	33' - 1"	10' - 2"	13' - 0"	12' - 0"	11' - 1"	0' - 8"	1' - 3"	1' - 9"
	14' - 0"	16' - 11"	33' - 1"	12' - 2"	15' - 0"	12' - 0"	13' - 1"	0' - 8"	1' - 3"	1' - 9"
	16' - 0"	18' - 11"	33' - 1"	14' - 2"	17' - 0"	12' - 0"	15' - 1"	0' - 8"	1' - 3"	1' - 9"
	20' - 0"	22' - 11"	33' - 1"	18' - 2"	21' - 0"	12' - 0"	19' - 1"	0' - 8"	1' - 3"	1' - 9"
SS1 80'	10' - 0"	13' - 4"	37' - 10"	7' - 10"	11' - 1"	12' - 0"	9' - 0"	0' - 8"	1' - 6"	2' - 0"
	12' - 0"	15' - 4"	37' - 10'	9' - 10"	13' - 1"	12' - 0"	11' - 0"	0' - 8"	1' - 6"	2' - 0"
	14' - 0"	17' - 4"	37' - 10"	11' - 10"	15' - 1"	12' - 0"	13' - 0"	0' - 8"	1' - 6"	2' - 0"
	16' - 0"	19' - 4"	37' - 10"	13' - 10"	17' - 1"	12' - 0"	15' - 0"	0' - 8"	1' - 6"	2' - 0"
	20' - 0"	23' - 4"	37' - 10"	17' - 10"	21' - 1"	12' - 0"	19' - 0"	0' - 8"	1' - 6"	2' - 0"
SS1 90'	12' - 0"	15' - 9"	42' - 4"	9' - 5"	13' - 0"	12' - 0"	10' - 8"	0' - 8"	2' - 0"	2' - 6"
	14' - 0"	17' - 9"	42' - 4"	11' - 5"	15' - 0"	12' - 0"	12' - 8"	0' - 8"	2' - 0"	2' - 6"
	16' - 0"	19' - 9"	42' - 4"	13' - 5"	17' - 0'	12' - 0"	14' - 8"	0' - 8"	2' - 0"	2' - 6"
	20' - 0"	23' - 9"	42' - 4"	17' - 5"	21' - 0"	12' - 0"	18' - 8"	0' - 8"	2' - 0"	2' - 6"
SS1 100'	12' - 0"	16' - 2"	47' - 4"	9' - 5"	13' - 5"	24' - 0"	10' - 5"	0' - 8"	2' - 0"	3' - 0"
	14' - 0"	18' - 2"	47' - 4"	11' - 5"	15' - 5	24' - 0"	12' - 5"	0' - 8"	2' - 0"	3' - 0"
	16' - 0"	20' - 2"	47' - 4"	13' - 5"	17' - 5"	24' - 0"	14' - 5"	0' - 8"	2' - 0"	3' - 0"
	20' - 0"	24' - 2"	47' - 4"	17' - 5"	21' - 5"	24' - 0"	18' - 5"	0' - 8"	2' - 0"	3' - 0"

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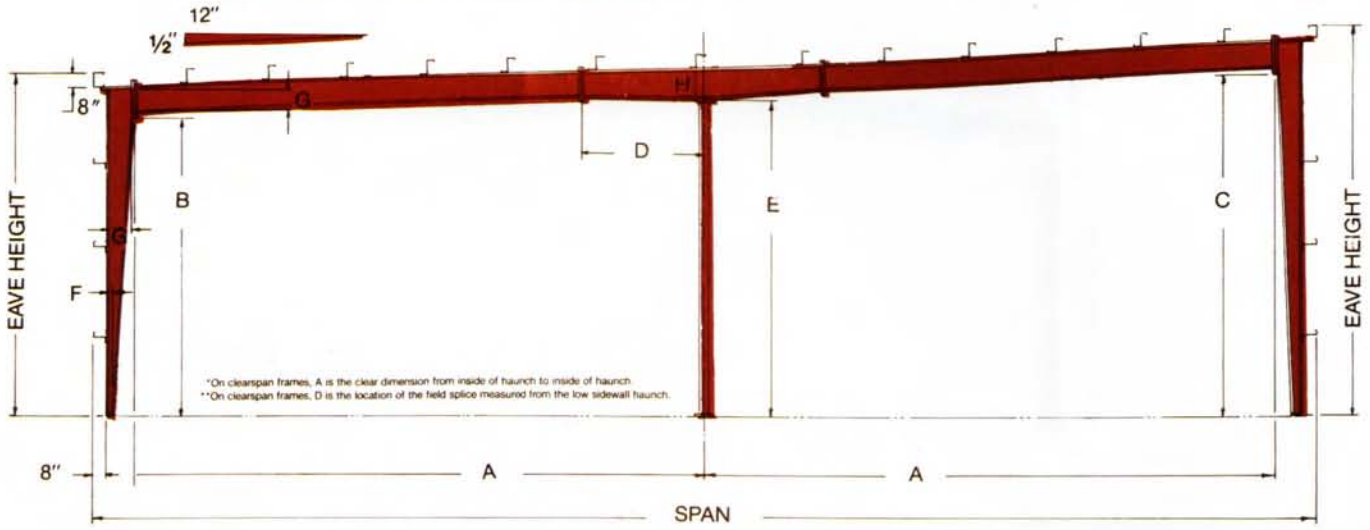


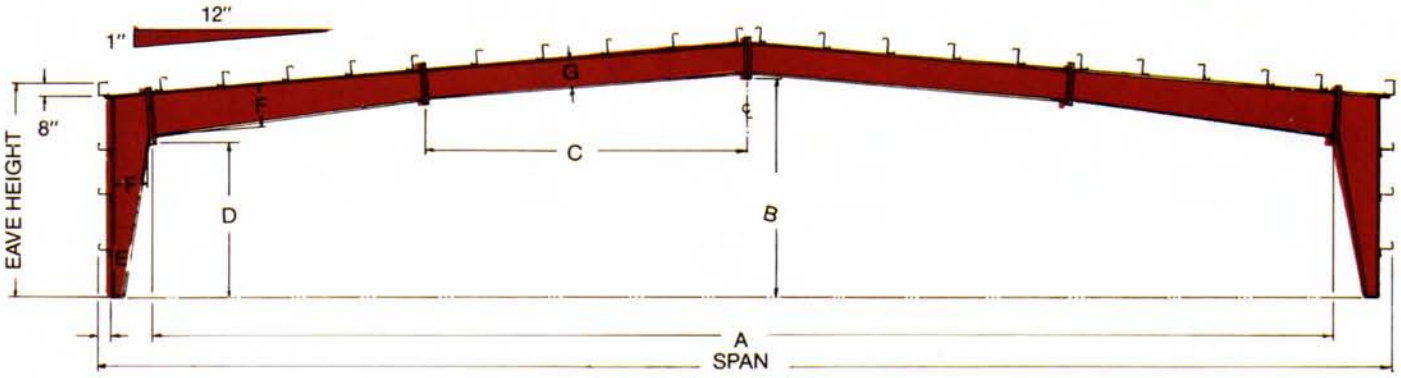
SPAN	EAVE HEIGHT LOW	EAVE HEIGHT HIGH	A *	B	C	D **	E	F	G	H
SS 20'	10' - 0"	10' - 10"	18' - 8"	8' - 8"	9' - 11"	NA	10' - 5"	0' - 8"	0' - 8"	0' - 8"
	12' - 0"	12' - 10"	18' - 8"	10' - 8"	11' - 11"	NA	12' - 5"	0' - 8"	0' - 8"	0' - 8"
	14' - 0"	14' - 10"	18' - 8"	12' - 8"	13' - 11"	NA	14' - 5"	0' - 8"	0' - 8"	0' - 8"
SS 24'	10' - 0"	11' - 0"	22' - 8"	8' - 6"	9' - 9"	NA	10' - 6"	0' - 8"	0' - 8"	0' - 8"
	12' - 0"	13' - 0"	22' - 8"	10' - 6"	11' - 9"	NA	12' - 6"	0' - 8"	0' - 8"	0' - 8"
	14' - 0"	15' - 0"	22' - 8"	12' - 6"	13' - 9"	NA	14' - 6"	0' - 8"	0' - 8"	0' - 8"
SS 30'	10' - 0"	11' - 3"	28' - 8"	8' - 6"	9' - 9"	NA	10' - 7"	0' - 8"	1' - 0"	1' - 0"
	12' - 0"	13' - 3"	28' - 8"	10' - 6"	11' - 9"	NA	12' - 7"	0' - 8"	1' - 0"	1' - 0"
	14' - 0"	15' - 3"	28' - 8"	12' - 6"	13' - 9"	NA	14' - 7"	0' - 8"	1' - 0"	1' - 0"
SS 40'	10' - 0"	11' - 8"	36' - 8"	8' - 5"	9' - 11"	NA	10' - 10"	0' - 8"	1' - 0"	1' - 0"
	12' - 0"	13' - 8"	36' - 8"	10' - 5"	11' - 11"	NA	12' - 10"	0' - 8"	1' - 0"	1' - 0"
	14' - 0"	15' - 8"	36' - 8"	12' - 5"	13' - 11"	NA	14' - 10"	0' - 8"	1' - 0"	1' - 0"
	16' - 0"	17' - 8"	36' - 8"	14' - 5"	15' - 11"	NA	16' - 10"	0' - 8"	1' - 0"	1' - 0"
	20' - 0"	21' - 8"	36' - 8"	18' - 5"	19' - 11"	NA	20' - 10"	0' - 8"	1' - 0"	1' - 0"
SS 50'	10' - 0"	12' - 1"	45' - 8"	7' - 11"	9' - 10"	22' - 10"	11' - 1"	0' - 8"	1' - 6"	1' - 6"
	12' - 0"	14' - 1"	45' - 8"	9' - 11"	11' - 10"	22' - 10"	13' - 1"	0' - 8"	1' - 6"	1' - 6"
	14' - 0"	16' - 1"	45' - 8"	11' - 11"	13' - 10"	22' - 10"	15' - 1"	0' - 8"	1' - 6"	1' - 6"
	16' - 0"	18' - 1"	45' - 8"	13' - 11"	15' - 10"	22' - 10"	17' - 1"	0' - 8"	1' - 6"	1' - 6"
	20' - 0"	22' - 1"	45' - 8"	17' - 11"	19' - 10"	22' - 10"	21' - 1"	0' - 8"	1' - 6"	1' - 6"
SS 60'	12' - 0"	14' - 6"	55' - 0"	9' - 7"	11' - 11"	27' - 6"	13' - 3	0' - 8"	1' - 10"	1' - 10"
	14' - 0"	16' - 6"	55' - 0"	11' - 7"	13' - 11"	27' - 6"	15' - 3"	0' - 8"	1' - 10"	1' - 10"
	16' - 0"	18' - 6"	55' - 0"	13' - 7"	15' - 11"	27' - 6"	17' - 3"	0' - 8"	1' - 10"	1' - 10"
	20' - 0"	22' - 6"	55' - 0"	17' - 7"	19' - 11"	27' - 6"	21' - 3"	0' - 8"	1' - 10"	1' - 10"
SS1 60'	10' - 0"	12' - 6"	28' - 1"	8' - 2"	10' - 6"	6' - 0"	9' - 1"	0' - 8"	1' - 3"	1' - 6"
	12' - 0"	14' - 6"	28' - 1"	10' - 2"	12' - 6"	6' - 0"	11' - 1"	0' - 8"	1' - 3"	1' - 6"
	14' - 0"	16' - 6"	28' - 1"	12' - 2"	14' - 6"	6' - 0"	13' - 1"	0' - 8"	1' - 3"	1' - 6"
	16' - 0"	18' - 6"	28' - 1"	14' - 2"	16' - 6"	6' - 0"	15' - 1"	0' - 8"	1' - 3"	1' - 6"
	20' - 0"	22' - 6"	28' - 1"	18' - 2"	20' - 6"	6' - 0"	19' - 1"	0' - 8"	1' - 3"	1' - 6"
SS1 70'	10' - 0"	12' - 11"	33' - 1"	8' - 2"	11' - 0"	12' - 0"	9' - 1"	0' - 8"	1' - 3"	1' - 9"
	12' - 0"	14' - 11"	33' - 1"	10' - 2"	13' - 0"	12' - 0"	11' - 1"	0' - 8"	1' - 3"	1' - 9"
	14' - 0"	16' - 11"	33' - 1"	12' - 2"	15' - 0"	12' - 0"	13' - 1"	0' - 8"	1' - 3"	1' - 9"
	16' - 0"	18' - 11"	33' - 1"	14' - 2"	17' - 0"	12' - 0"	15' - 1"	0' - 8"	1' - 3"	1' - 9"
	20' - 0"	22' - 11"	33' - 1"	18' - 2"	21' - 0"	12' - 0"	19' - 1"	0' - 8"	1' - 3"	1' - 9"
SS1 80'	10' - 0"	13' - 4"	37' - 10"	7' - 10"	11' - 1"	12' - 0"	9' - 0"	0' - 8"	1' - 6"	2' - 0"
	12' - 0"	15' - 4"	37' - 10'	9' - 10"	13' - 1"	12' - 0"	11' - 0"	0' - 8"	1' - 6"	2' - 0"
	14' - 0"	17' - 4"	37' - 10"	11' - 10"	15' - 1"	12' - 0"	13' - 0"	0' - 8"	1' - 6"	2' - 0"
	16' - 0"	19' - 4"	37' - 10"	13' - 10"	17' - 1"	12' - 0"	15' - 0"	0' - 8"	1' - 6"	2' - 0"
	20' - 0"	23' - 4"	37' - 10"	17' - 10"	21' - 1"	12' - 0"	19' - 0"	0' - 8"	1' - 6"	2' - 0"
SS1 90'	12' - 0"	15' - 9"	42' - 4"	9' - 5"	13' - 0"	12' - 0"	10' - 8"	0' - 8"	2' - 0"	2' - 6"
	14' - 0"	17' - 9"	42' - 4"	11' - 5"	15' - 0"	12' - 0"	12' - 8"	0' - 8"	2' - 0"	2' - 6"
	16' - 0"	19' - 9"	42' - 4"	13' - 5"	17' - 0'	12' - 0"	14' - 8"	0' - 8"	2' - 0"	2' - 6"
	20' - 0"	23' - 9"	42' - 4"	17' - 5"	21' - 0"	12' - 0"	18' - 8"	0' - 8"	2' - 0"	2' - 6"
SS1 100'	12' - 0"	16' - 2"	47' - 4"	9' - 5"	13' - 5"	24' - 0"	10' - 5"	0' - 8"	2' - 0"	3' - 0"
	14' - 0"	18' - 2"	47' - 4"	11' - 5"	15' - 5	24' - 0"	12' - 5"	0' - 8"	2' - 0"	3' - 0"
	16' - 0"	20' - 2"	47' - 4"	13' - 5"	17' - 5"	24' - 0"	14' - 5"	0' - 8"	2' - 0"	3' - 0"
	20' - 0"	24' - 2"	47' - 4"	17' - 5"	21' - 5"	24' - 0"	18' - 5"	0' - 8"	2' - 0"	3' - 0"

CLEARANCE DIMENSIONS ARE APPROXIMATE AND MAY CHANGE WITH LOADING CONDITION AND BAY SPACING.

LR

Low Roofline

The low roofline building systems are clear-span buildings that offer unobstructed floor space in buildings up to 120' in width. Sidewall columns and rafters are tapered for efficient use of the high strength steel. Bypass Girts are standard on LR Buildings.



BUILDING SPAN	EAVE HEIGHT	A	B	C	D	E	F	G
LR 30'	10'-0"	25'-11"	9'-0"	—	8'-1"	0'-8"	1'-3"	1'-3"
	12'-0"	25'-11"	11'-0"	—	10'-1"	0'-8"	1'-3"	1'-3"
	14'-0"	25'-11"	13'-0"	—	12'-1"	0'-8"	1'-3"	1'3"
	16'-0"	25'-11"	15'-0"	—	14-1"	0'-8"	1'-3"	1'-3"
	20'-0"	25'-6"	18'-9"	—	17'-11"	0'-8"	1'-6"	1'-6"
	24'-0"	25'-6"	22'-9"	—	21'-11"	0'-8"	1'-6"	1'-6"
LR 40'	10'-0"	35'-11"	9'-5"	—	8'-1"	0'-8"	1'-3"	1'-3"
	12'-0"	35'-11"	11'-5"	—	10'-1"	0'-8"	1'-3"	1'-3"
	14'-0"	35'-11"	13'-5"	—	12'-1"	0'-8"	1'-3"	1'-3"
	16'-0"	35'-11"	15'-5"	—	14'-1"	0'-8"	1'-3"	1'-3"
	20'-0"	35'-6"	19'-2"	—	17'-11"	0'-8"	1'-6"	1'-6"
	24'-0"	35'-6"	23'-2"	—	21'-11"	0'-8"	1'-6"	1'-6"
LR 50'	10'-0"	44'-5"	9'-7"	14'-2"	7'-5"	0'-8"	2'-0"	1'-6"
	12'-0"	44'-5"	11'-7"	14'-2"	9'-5"	0'-8"	2'-0"	1'-6"
	14'-0"	44'-5"	13'-7"	14'-2"	11'-5"	0'-8"	2'-0"	1'-6"
	16'-0"	44'-5"	15'-7"	14'-2"	13'-5"	0'-8"	2'-0"	1'-6"
	20'-0"	44'-5"	19'-7"	14'-2"	17'-5"	0'-8"	2'-0"	1'-6"
	24'-0"	44'-5"	23'-7"	14'-2"	21'-5"	0'-8"	2'-0"	1'-6"
LR 60'	10'-0"	54'-5"	10'-0"	19'-10"	7'-5"	0'-8"	2'-0"	1'-6"
	12'-0"	54'-5"	12'-0"	19'-10"	9'-5"	0'-8"	2'-0"	1'-6"
	14'-0"	54'-5"	14'-0"	19'-10"	11'-5"	0'-8"	2'-0"	1'-6"
	16'-0"	54'-5"	16'-0"	19'-10"	13'-5"	0'-8"	2'-0"	1'-6"
	20'-0"	54'-5"	20'-0"	19'-10"	17'-5"	0'-8"	2'-0"	1'-6"
	24'-0"	54'-5"	24'-0"	19'-10"	21'-5"	0'-8"	2'-0"	1'-6"
LR 70'								
	12'-0"	64'-0"	12'-3"	23'-10"	9'-2"	0'-8"	2'-3"	1'-8"
	14'-0"	64'-0"	14'-3"	23'-10"	11'-2"	0'-8"	2'-3"	1'-8"
	16'-0"	64'-0"	18'-3"	23'-10"	13'-2"	0'-8"	2'-3"	1'-8"
	20'-0"	64'-0"	20'-3"	23'-10"	17'-2"	0'-8"	2'-3"	1'-8"
	24'-0"	64'-0"	24'-3"	23'-10"	21'-2"	0'-8"	2'-3"	1'-8"

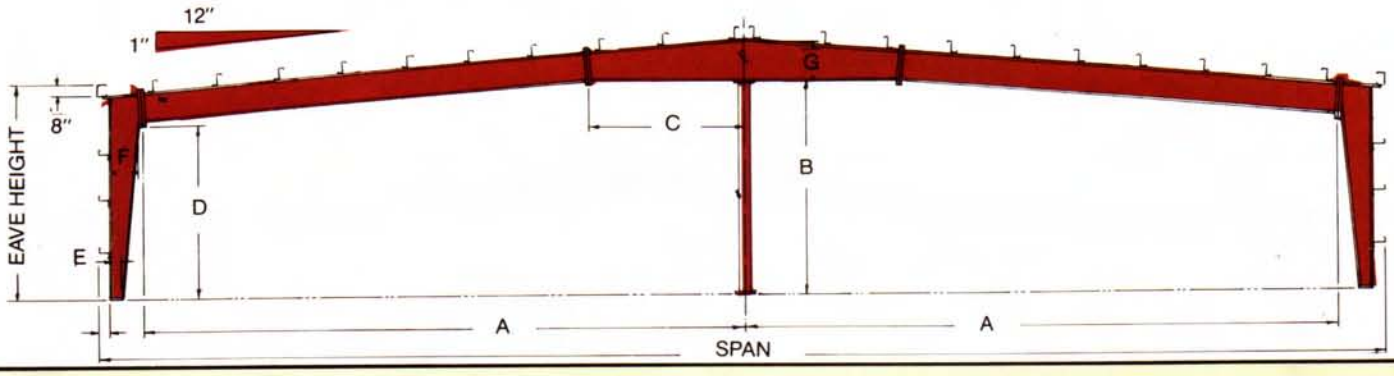
BUILDING SPAN	EAVE HEIGHT	A	B	C	D	E	F	G
LR 80'								
	12'-0"	72'-5"	12'-6"	19'-10"	8'-6"	0'-8"	3'-0"	1'-10"
	14'-0"	72'-5"	14'-6"	19'-10"	10'-6"	0'-8"	3'-0"	1'-10"
	16'-0"	72'-5"	16'-6"	19'-10"	12'-6"	0'-8"	3'-0"	1'-10"
	20'-0"	72'-5"	20'-6"	19'-10"	16'-6"	0'-8"	3'-0"	1'-10"
	24'-0"	72'-5"	24'-6"	19'-10"	20'-6"	0'-8"	3'-0"	1'-10"
LR 90'								
	12'-0"	82'-5"	13'-0"	11'-10"	8'-6"	0'-8"	3'-0"	2'-0"
	14'-0"	82'-5"	15'-0"	11'-10"	10'-6"	0'-8"	3'-0"	2'-0"
	16'-0"	82'-5"	17'-0"	11'-10"	12'-6"	0'-8"	3'-0"	2'-0"
	20'-0"	82'-5"	21'-0"	11' -10"	16'-6"	0'-8"	3'-0"	2'-0"
	24'-0"	82'-5"	25'-0"	11'-10"	20'-6"	0'-8"	3'-0"	2'-0"
LR 100'								
	12'-0"	91'-11"	13'-2"	25'-0"	8'-3"	1'-0"	3'-3"	2'-0"
	14'-0"	91'-11"	15'-2"	25'-0"	10'-3"	1'-0"	3'-3"	2'-0"
	16'-0"	91'-11"	17'-2"	25'-0"	12'-3"	1'-0"	3'-3"	2'-0"
	20'-0"	91'-11"	21'-2"	25'-0"	16'-3"	1'-0"	3'-3"	2'-0"
	24'-0"	91'-11"	25'-2"	25'-0"	20'-3"	1'-0"	3'-3"	2'-0"
LR 110'								
	12'-0"	100'-1"	13'-7"	23'-11"	7'-10"	1'-0"	3'-8"	2'-0"
	14'-0"	101'-1"	15'-7"	23'-11"	9'-10"	1'-0"	3'-8"	2'-0"
	16'-0"	100'-1"	17'-7"	23'-11"	11'-10"	1'-0"	3'-8"	2'-0"
	20'-0"	101'-1"	21'-7"	23'-11"	15'-10"	1'-0"	3'-8"	2'-0"
	24'-0"	101'-1"	25'-7"	23'-11"	19'-10"	1'-0"	3'-8"	2'-0"
LR 120'								
	14'-0"	110'-5"	15'-8"	29'-10"	9'-7"	1'-0"	4'-0"	2'-4"
	16'-0"	110'-5"	17'-8"	29'-10"	11'-7"	1'-0"	4'-0"	2'-4"
	20'-0"	110'-5"	21'-8"	29'-10"	15'-7"	1'-0"	4'-0"	2'-4"
	24'-0"	110'-5"	25'-8"	29'-10"	19'-7"	1'-0"	4'-0"	2'-4"

CLEARANCE DIMENSIONS ARE APPROXIMATE AND MAY CHANGE WITH LOADING CONDITION AND BAY SPACING.

LM 1

Lowrise Modular 1

The lowrise modular building system can meet the demands of greater expanse with the use of interior columns. Tapered column rigid frames are combined with interior pipe columns and bypass sidewall girts. Large manufacturing warehouses and commercial operations rely upon this system where economy is of the utmost importance.



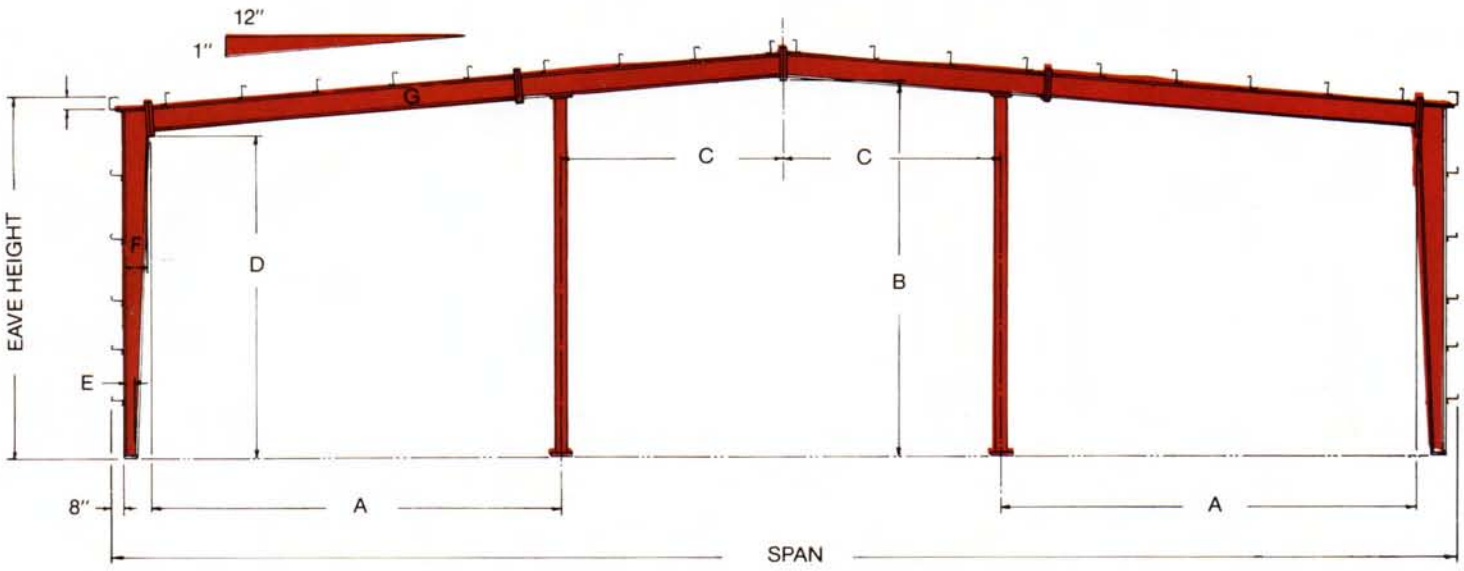
BUILDING								
SPAN	EAVE HEIGHT	A	B	C	D	E	F	G
LM 1 60'	10' - 0"	28' - 0"	10' - 4"	2' - 11"	8' - 1"	0' - 8"	1' - 3"	1' - 6"
	12' - 0"	28' - 0"	12' - 4"	2' - 11"	10' - 1"	0' - 8"	1' - 3"	1' - 6"
	14' - 0"	28' - 0"	14' - 4"	2' - 11"	12' - 1"	0' - 8"	1' - 3"	1' - 6"
	16' - 0"	28' - 0"	16' - 4"	2' - 11"	14 - 1"	0' - 8"	1' - 3"	1' - 6"
	20' - 0"	27' - 9"	20' - 1"	2' - 11"	17' - 11"	0' - 8"	1' - 6"	1' - 9"
LM 1 70'	10' - 0"	33' - 0"	10' - 4"	7' - 11"	8' - 1"	0' - 8"	1' - 3"	1' - 11"
	12' - 0"	33' - 0"	12' - 4"	7' - 11"	10' - 1"	0' - 8"	1' - 3"	1' - 11"
	14' - 0"	33' - 0"	14' - 4"	7' - 11"	12' - 1"	0' - 8"	1' - 3"	1' - 11"
	16' - 0"	33' - 0"	16' - 4"	7' - 11"	14' - 1"	0' - 8"	1' - 3"	1' - 11"
	20' - 0"	32' - 9"	20' - 1"	7' - 11"	17' - 11"	0' - 8"	1' - 6"	2' - 2"
LM 1 80'	10' - 0"	38' - 0"	10' - 8"	8' - 11"	8' - 1"	0' - 8"	1' - 3"	2' - 0"
	12' - 0"	38' - 0"	12' - 8"	8' - 11"	10' - 1"	0' - 8"	1' - 3"	2' - 0"
	14' - 0"	38' - 0"	14' - 8"	8' - 11"	12' - 1"	0' - 8"	1' - 3"	2' - 0"
	16' - 0"	38' - 0"	16' - 8"	8' - 11"	14' - 1"	0' - 8"	1' - 3"	2' - 0"
	20' - 0"	37' - 8"	20' - 6"	7' - 11"	17' - 11"	0' - 8"	1' - 6"	2' - 2"
	24' - 0"	37' - 8"	24' - 6"	7' - 11"	21' - 11"	0' - 8"	1' - 6"	2' - 2"
LM 1 90'	12' - 0"	42' - 2"	12' - 6"	7' - 0"	9' - 6"	0' - 8"	2' - 0"	2' - 7"
	14' - 0"	42' - 2"	14' - 6"	7' - 0"	11' - 6"	0' - 8"	2' - 0"	2' - 7"
	16' - 0"	42' - 2"	16' - 6"	7' - 0"	13' - 6"	0' - 8"	2' - 0"	2' - 7"
	20' - 0"	42' - 2"	20' - 6"	7' - 0"	17' - 6"	0' - 8"	2' - 0"	2' - 7"
	24' - 0"	42' - 2"	24' - 6"	7' - 0"	21' - 6"	0' - 8"	2' - 0"	2' - 7"
LM 1 100'	12' - 0"	47' - 2"	12' - 5"	11' - 11"	9' - 6"	0' - 8"	2' - 0"	3' - 0"
	14' - 0"	47' - 2"	14' - 5"	11' - 11"	11' - 6"	0' - 8"	2' - 0"	3' - 0"
	16' - 0"	47' - 2"	16' - 5"	11' - 11"	13' - 6"	0' - 8"	2' - 0"	3' - 0"
	20' - 0"	47' - 2"	20' - 5"	11' - 11"	17' - 6"	0' - 8"	2' - 0"	3' - 0"
	24' - 0"	47' - 2"	24' - 5"	11' - 11"	21' - 6"	0' - 8"	2' - 0"	3' - 0"
LM 1 110'	12' - 0"	52' - 2"	12' - 10"	11' - 11"	9' - 6"	0' - 8"	2' - 0"	3' - 0"
	14' - 0"	52' - 2"	14' - 10"	11' - 11"	11' - 6"	0' - 8"	2' - 0"	3' - 0"
	16' - 0"	52' - 2"	16' - 10"	11' - 11"	13' - 6"	0' - 8"	2' - 0"	3' - 0"
	20' - 0"	52' - 2"	20' - 10"	11' - 11"	17' - 6"	0' - 8"	2' - 0"	3' - 0"
	24' - 0"	52' - 2"	24' - 10"	11' - 11"	21' - 6"	0' - 8"	2' - 0"	3' - 0"
LM 1 120'	12' - 0"	57' - 2"	12' - 11"	16' - 2"	9' - 6"	0' - 8"	2' - 0"	3' - 4"
	14' - 0"	57' - 2"	14' - 11"	16' - 2"	11' - 6"	0' - 8"	2' - 0"	3' - 4"
	16' - 0"	57' - 2"	16' - 11"	16' - 2"	13' - 6"	0' - 8"	2' - 0"	3' - 4"
	20' - 0"	57' - 2"	20' - 11"	16' - 2"	17' - 6"	0' - 8"	2' - 0"	3' - 4"
	24' - 0"	57' - 2"	24' - 11"	16' - 2"	21 - 6"	0' - 8"	2' - 0"	3' - 4"
LM 1 140'	12' - 0"	67' - 3"	13' - 10"	16' - 2"	9' - 6"	0' - 8"	2' - 0"	3' - 4"
	14' - 0"	67' - 3"	15' - 10"	16' - 2"	11' - 6'	0' - 8"	2' - 0"	3'- 4"
	16' - 0"	67' - 3"	17' - 10"	16' - 2"	13' - 6"	0' -8"	2' - 0"	3' - 4"
	20' - 0"	67' - 3"	21' - 10"	16' - 2"	17' - 6"	0' - 8"	2' - 0"	3' - 4"
	24' - 0"	67' - 3"	25' - 10"	16' - 2"	21' - 6"	0' - 8"	2' - 0"	3' - 4"

CLEARANCE DIMENSIONS ARE APPROXIMATE AND MAY CHANGE WITH LOADING CONDITION AND BAY SPACING.

LM2

Lowrise Modular 2

Similar to the LM1 the LM2 offers the same capabilities of achieving great width. However, the LM2 utilizes two interior pipe columns per intermediate bay. The columns are located off center leaving the center of the building floorspace unobstructed. The LM2 features a 1:12 roof slope and bypass sidewall girts. An LM3 building system is also available and is characterized by three equally spaced interior pipe columns.



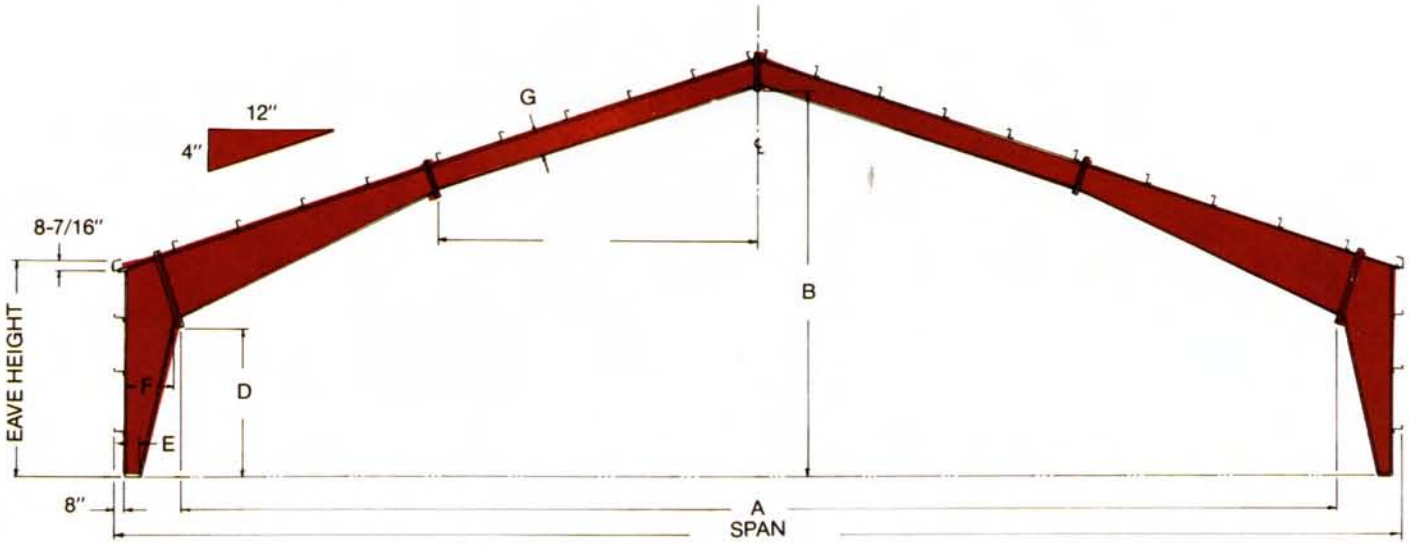
BUILDING		A	B	C	D	E	F	G
SPAN	EAVE HEIGHT							
LM 2 90'	12' - 0"	28' - 1"	13' - 11"	15' - 0"	10' - 2"	0' - 8"	1' - 3"	1' - 3"
	14' - 0"	28' - 1"	15' - 11"	15' - 0"	12' - 2"	0' - 8"	1' - 3"	1' - 3"
	16' - 0"	28' - 1"	17' - 11"	15' - 0"	14 - 2"	0' - 8"	1' - 3"	1' - 3"
	20' - 0"	28' - 1"	21' - 11"	15' - 0"	19' - 3"	0' - 8"	1' - 3"	1' - 3"
	24' - 0"	28' - 0"	25' - 11"	15' - 0"	22' - 3"	0' - 8"	1' - 3"	1' - 3"
LM 2 100'	12' - 0"	33' - 1"	13' - 11"	15' - 0"	10' - 2"	0' - 8"	1' - 3"	1' - 3"
	14' - 0"	33' - 1"	15' - 11"	15' - 0"	12' - 2"	0' - 8"	1' - 3"	1' - 3"
	16' - 0"	33' - 1"	17' - 11"	15' - 0"	14' - 2"	0' - 8"	1' - 3"	1' - 3"
	20' - 0"	33' - 1"	21' - 11"	15' - 0"	19' - 3"	0' - 8"	1' - 3"	1' - 3"
	24' - 0"	33' - 0"	25' - 11"	15' - 0"	22' - 3"	0' - 8"	1' - 3"	1' - 3"
LM 2 110'	12' - 0"	32' - 10"	14' - 1"	20' - 0"	10' - 0"	0' - 8"	1' - 6"	1' - 6"
	14' - 0"	32' - 10"	16' - 1"	20' - 0"	12' - 0"	0' - 8"	1' - 6"	1' - 6"
	16' - 0"	32' - 10"	18' - 1"	20' - 0"	14' - 0"	0' - 8"	1' - 6"	1' - 6"
	20' - 0"	32' - 10"	22' - 1"	20' - 0"	18' - 0"	0' - 8"	1' - 6"	1' - 6"
	24' - 0"	32' - 8"	25' - 11"	20' - 0"	21' - 10"	0' - 10"	1' - 8"	1' - 8"
LM 2 120'	12' - 0"	37' - 10"	14' - 6"	20' - 0"	10' - 0"	0' - 8"	1' - 6"	1' - 6"
	14' - 0"	37' - 10"	16' - 6"	20' - 0"	12' - 0"	0' - 8"	1' - 6"	1' - 6"
	16' - 0"	37' - 10"	18' - 6"	20' - 0"	14' - 0"	0' - 8"	1' - 6"	1' - 6"
	20' - 0"	37' - 10"	22' - 6"	20' - 0"	18' - 0"	0' - 8"	1' - 6"	1' - 6"
	24' - 0"	37' - 8"	26' - 4"	20' - 0"	21' - 10"	0' - 10"	1' - 8"	1' - 8"
LM 2 150'	12' - 0"	47' - 3"	15' - 7"	25' - 0"	9' - 6"	0' - 8"	2' - 0"	2' - 0"
	14' - 0"	47' - 3"	17' - 7"	25' - 0"	11' - 6"	0' - 8"	2' - 0"	2' - 0"
	16' - 0"	47' - 3"	19' - 7"	25' - 0"	13' - 6"	0' - 8"	2' - 0"	2' - 0"
	20' - 0"	47' - 3"	23' - 7"	25' - 0"	17' - 6"	0' - 8"	2' - 0"	2' - 0"
	24' - 0"	47' - 3"	27' - 7"	25' - 0"	21' - 6"	0' - 8"	2' - 0"	2' - 0"
LM 2 180'	12' - 0"	57' - 3"	16' - 10"	30' - 0"	9' - 6"	0' - 8"	2' - 0"	2' - 0"
	14' - 0"	57' - 3"	18' - 10"	30' - 0"	11' - 6"	0' - 8"	2' - 0"	2' - 0"
	16' - 0"	57' - 3"	20' - 10"	30' - 0"	13' - 6"	0' - 8"	2' - 0"	2' - 0"
	20' - 0"	57' - 3"	24' - 10"	30' - 0"	17' - 6"	0' - 8"	2' - 0"	2' - 0"
	24' - 0"	57' - 3"	28' - 10"	30' - 0"	21' - 6"	0' - 8"	2' - 0"	2' - 0"
LM 2 200'	12' - 0"	63' - 11"	17' - 8"	33' - 4"	9' - 6"	0' - 8"	2' - 0"	2' - 0"
	14' - 0"	63' - 11"	19' - 8"	33' - 4"	11' - 6"	0' - 8"	2' - 0"	2' - 0"
	16' - 0"	63' - 11"	21' - 8"	33' - 4"	13' - 6"	0' - 8"	2' - 0"	2' - 0"
	20' - 0"	63' - 11"	25' - 8"	33' - 4"	17' - 6"	0' - 8"	2' - 0"	2' - 0"
	24' - 0"	63' - 11"	29' - 8"	33' - 4"	21' - 6"	0' - 8"	2' - 0"	2' - 0"

CLEARANCE DIMENSIONS ARE APPROXIMATE AND MAY CHANGE WITH LOADING CONDITION AND BAY SPACING.

RF

Rising Frame

The rising frame building system features a 4:12 roof slope with a clear span to maintain high vertical clearance. The tapered column rigid frame building system has bypass sidewall girts for applications including marinas, gymnasiums, tennis courts or hangars. This building system has excellent center clearance advantages.



BUILDING SPAN	EAVE HEIGHT	A	B	C	D	E	F	G
RF 30'	10'-0"	25'-6"	12'-11"	12'-9"	8'-4"	0'-8"	1'-6"	1'-0"
	12'-0"	25'-6"	14'-11"	12'-9"	10'-4"	0'-8"	1'-6"	1'-0"
	14'-0"	25'-6"	16'-11"	12'-9"	12'-4"	0'-8"	1'-6"	1'-0"
	16'-0"	25'-6"	18'-11"	12'-9"	14-4"	0'-8"	1'-6"	1'-0"
	20'-0"	25'-6"	22'-11"	12'-9"	18'-4"	0'-8"	1'-6"	1'-0"
	24'-0"	25'-6"	26'-11"	12'-9"	22'-4"	0'-8"	1'-6"	1'-0"
RF 40'	10'-0"	35'-6"	14'-7"	17'-9"	8'-4"	0'-8"	1'-6"	1'-0"
	12'-0"	35'-6"	16'-7"	17'-9"	10'-4"	0'-8"	1'-6"	1'-0"
	14'-0"	35'-6"	18'-7"	17'-9"	12'-4"	0'-8"	1'-6"	1'-0"
	16'-0"	35'-6"	20'-7"	17'-9"	14'-4"	0'-8"	1'-6"	1'-0"
	20'-0"	35'-6"	24'-7"	17"-9"	18'-4"	0'-8"	1'-6"	1'-0"
	24'-0"	35'-6"	28'-7"	17'-9"	22'-4"	0'-8"	1'-6"	1'-0"
RF 50'	10'-0"	45'-0"	16'-3"	22'-6"	8'-2"	0'-8"	1'-9"	1'-0"
	12'-0"	45'-0"	18'-3"	22'-6"	10'-2"	0'-8"	1'-9"	1'-0"
	14'-0"	45'-0"	20'-3"	22'-6"	12'-2"	0'-8"	1'-9"	1'-0"
	16'-0"	45'-0"	22'-3"	22'-6"	14'-2"	0'-8"	1'-9"	1'-0"
	20'-0"	45'-0"	26'-3"	22'-6"	18'-2"	0'-8"	1'-9"	1'-0"
	24'-0"	44'-11"	30'-3"	22'-6"	22'-2"	0'-8"	1'-9"	1'-0"
RF 60'	10'-0"	54'-0"	17'-8"	27'-0"	7'-10"	0'-8"	2'-3"	1'-4"
	12'-0"	54'-0"	19'-8"	27'-0"	9'-10"	0'-8"	2'-3"	1'-4"
	14'-0"	54'-0"	21'-8"	27'-0"	11'-10"	0'-8"	2'-3"	1'-4"
	16'-0"	54'-0"	23'-8"	27'-0"	13'-10"	0'-8"	2'-3"	1'-4"
	20'-0"	53'-11"	27'-8"	27'-0"	17'-10"	0'-8"	2'-3"	1'-4"
	24'-0"	53'-11"	31'-8"	27'-0"	21'-10"	0'-8"	2'-3"	1'-4"
RF 70'	12'-0"	63'-5"	20'-11"	31'-9"	9'-7"	0'-8"	2'-6"	1'-8"
	14'-0"	63'-5"	22'-11"	31'-9"	11'-7"	0'-8"	2'-6"	1'-8"
	16'-0"	63'-5"	24'-11"	31'-9"	13'-7"	0'-8"	2'-6"	1'-8"
	20'-0"	63'-5"	28'-11"	9"	17'-7"	0'-8"	2'-6"	1'-8"
	24'-0"	63'-5"	32'-11"	31'-9"	21'-7"	0'-8"	2'-6"	1'-8"

BUILDING SPAN	EAVE HEIGHT	A	B	C	D	E	F	G
RF 80'	12'-0"	72'-6"	22'-7"	36'-3"	9'-3"	0'-8"	3'-0"	1'-8"
	14'-0"	72'-6"	24'-1"	36'-3"	11'-3"	0'-8"	3'-0"	1'-8"
	16'-0"	72'-6"	26'-7"	36'-3"	13'-3"	0'-8"	3'-0"	1'-8"
	20'-0"	72'-6"	30'-7"	36'-3"	17'-3"	0'-8"	3'-0"	1'-8"
	24'-0"	72'-6"	34'-7"	36'-3"	21'-3"	0'-8"	3'-0"	1'-8"
RF 90'	12'-0"	82'-5"	24'-2"	17'-3"	9'-3"	0'-8"	3'-0"	1'-9"
	14'-0"	82'-5"	26'-2"	17'-3"	11'-3"	0'-8"	3'-0"	1'-9"
	16'-0"	82'-5"	28'-2"	17'-3"	13'-3"	0'-8"	3'-0"	1'-9"
	20'-0"	82'-5"	32'-2"	17"-3"	17'-3"	0'-8"	3'-0"	1'-9"
	24'-0"	82'-5"	36'-2"	17'-3"	21'-3"	0'-8"	3'-0"	1'-9"
RF 100'	12'-0"	91'-5"	26'-2"	17'-3"	8'-11"	1'-0"	3'-6"	1'-9"
	14'-0"	91'-5"	28'-2"	17'-3"	10'-11"	1'-0"	3'-6"	1'-9"
	16'-0"	91'-5"	30'-2"	17'-3"	12'-11"	1'-0"	3'-6"	1'-9"
	20'-0"	91'-5"	34'-2"	17'-3"	16'-11"	1'-0"	3'-6"	1'-9"
	24'-0"	91'-5"	38'-2"	17'-3"	20'-11"	1'-0"	3'-6"	1'-9"
RF 110'	12'-0"	100'-11"	27'-6"	17'-3"	8'-8"	1'-0"	3'-9"	1'-9"
	14'-0"	100'-11"	29'-6"	17'-3"	10'-8"	1'-0"	3'-9"	1'-9"
	16'-0"	100'-11"	31'-6"	17'-3"	12'-8"	1'-0"	3'-9"	1'-9"
	20'-0"	100'-11"	35'-6"	17'-3"	16'-8"	1'-0"	3'-9"	1'-9"
	24'-0"	100'-11"	39'-6"	17'-3"	20'-8"	1'-0"	3'-9"	1'-9"
RF 120'	12'-0"	110'-5"	29'-3"	27'-11"	8'-6"	1'-0"	4'-0"	1'-8"
	14'-0"	110'-5"	31'-3"	27'-11"	10'-6"	1'-0"	4'-0"	1'-8"
	16'-0"	110'-5"	33'-3"	27'-11"	12'-6"	1'-0"	4'-0"	1'-8"
	20'-0"	110'-5"	37'-3"	27'-11"	16'-6"	1'-0"	4'-0"	1'-8"
	24'-0"	110'-5"	41'-3"	27'-11"	20'-6"	1'-0"	4'-0"	1'-8"

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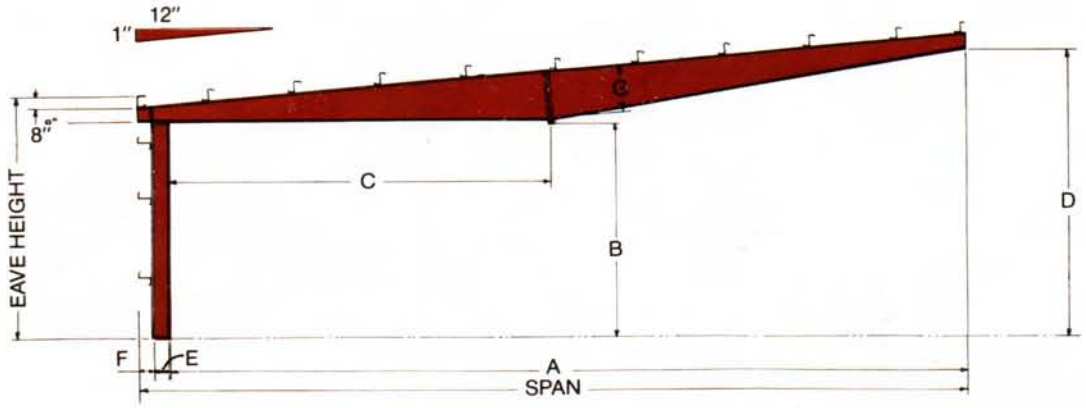
WU

Wing Units

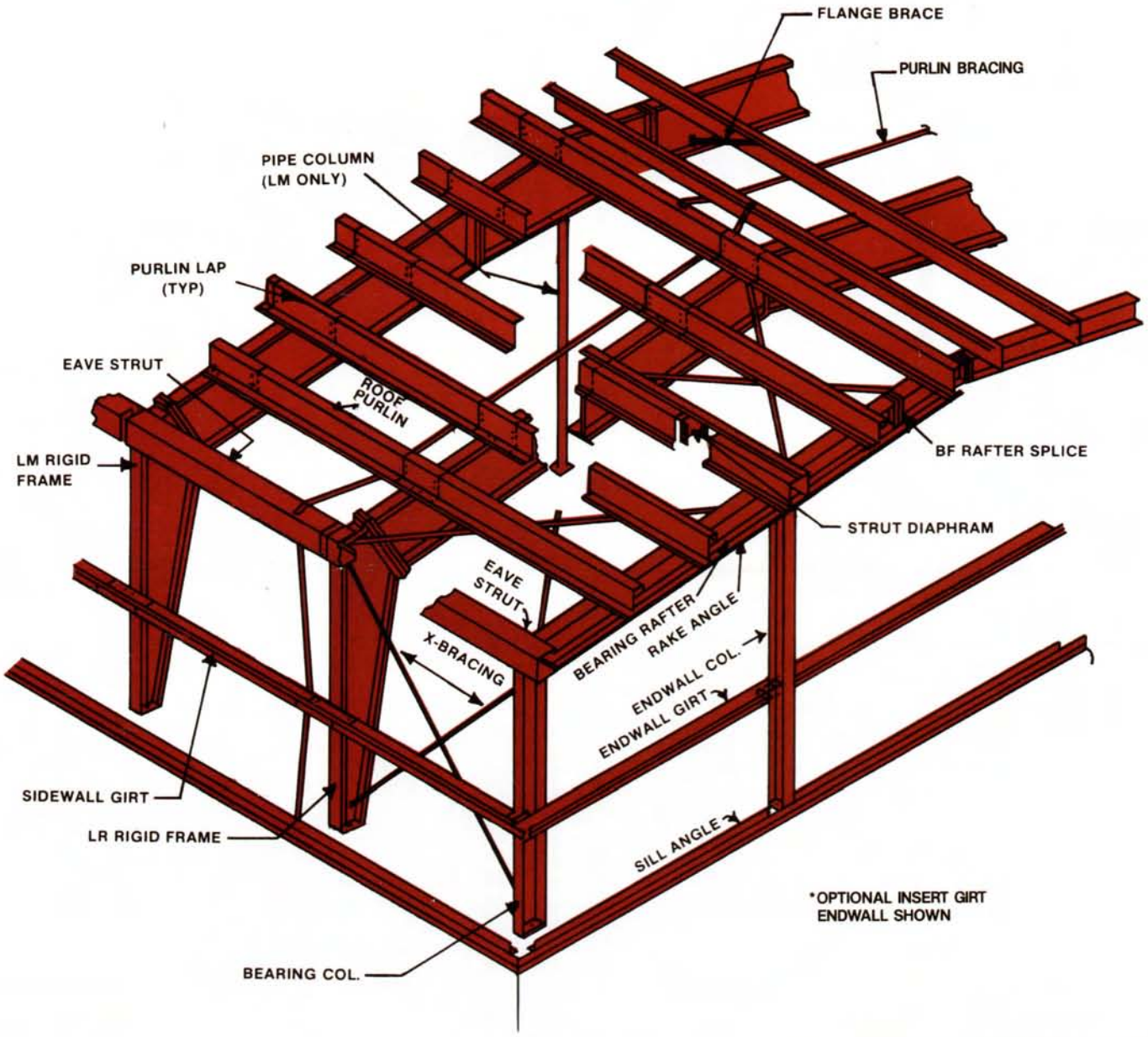
Wing units provide the versatile capacity for buildings to expand as the need for more room arises. Wing units consist of simple span frame extensions ranging from 20 to 48 feet. All Wing units have bypass sidewall girts and constant depth columns. The vertical column structures can be harmoniously applied to any Dean Building without giving the appearance of a later addition to the existing building.



BUILDING								
SPAN	EAVE HEIGHT	A	B	C	D	E	F	G
20' WING UNIT	8' - 4"	19' - 3"	7' - 0"	9' - 4"	8' - 8"	0' - 8"	0' - 1"	1' - 6"
	10' - 4"	19' - 3"	9' - 0"	9' - 4"	10' - 8"	0' - 8"	0' - 1"	1' - 6"
	12' - 4"	19' - 3"	11' - 0"	9' - 4"	12' - 8"	0' - 8"	0' - 1"	1' - 6"
	14' - 4"	19' - 3"	13' - 0"	9' - 4"	14' - 8"	0' - 8"	0' - 1"	1' - 6"
	16' - 4"	19' - 3"	15' - 0"	9' - 4"	16' - 8"	0' - 8"	0' - 1"	1' - 6"
	18' - 4"	19' - 3"	17' - 0"	9' - 4"	18' - 8"	0' - 8"	0' - 1"	1' - 6"
	22' - 4"	19' - 3"	21' - 0"	9' - 4"	22' - 8"	0' - 8"	0' - 1"	1' - 6"
24' WING UNIT	10' - 0"	23' - 3"	8' - 8"	11' - 5"	10' - 8"	0' - 8"	0' - 1"	1' - 8"
	12' - 0"	23' - 3"	10' - 8"	11' - 5"	12' - 8"	0' - 8"	0' - 1"	1' - 8"
	14' - 0"	23' - 3"	12' - 8"	11' - 5"	14' - 8"	0' - 8"	0' - 1"	1' - 8"
	16' - 0"	23' - 3"	14' - 8"	11' - 5"	16' - 8"	0' - 8"	0' - 1"	1' - 8"
	18' - 0"	23' - 3"	16' - 8"	11" - 5"	18' - 8"	0' - 8"	0' - 1"	1' - 8"
	22' - 0"	23' - 3"	20' - 8"	11' - 5"	22' - 8"	0' - 8"	0' - 1"	1' - 8"
30' WING UNIT	9' - 6"	28' - 8"	8' - 2"	13' - 9"	10' - 8"	0' - 8"	0' - 8"	1' - 11"
	11' - 6"	28' - 8"	10' - 2"	13' - 9"	12' - 8"	0' - 8"	0' - 8"	1' - 11"
	13' - 6"	28' - 8"	12' - 2"	13' - 9"	14' - 8"	0' - 8"	0' - 8"	1' - 11"
	17' - 6"	28' - 8"	16' - 2"	13' - 9"	18' - 8"	0' - 8"	0' - 8"	1' - 11"
	21' - 6"	28' - 8"	20' - 2"	13' - 9"	22' - 8"	0' - 8"	0' - 8"	1' - 11"
40 WING UNIT	10' - 8"	38' - 8"	9' - 4"	18' - 10"	12' - 8"	0' - 8"	0' - 8"	2' - 4"
	12' - 8"	38' - 8"	11' - 4"	18' - 10"	14' - 8"	0' - 8"	0' - 8"	2' - 4"
	16' - 8"	38' - 8"	15' - 4"	18' - 10"	18' - 8"	0' - 8"	0' - 8"	2' - 4"
	20' - 8"	38' - 8"	19' -4"	18' - 10"	22' - 8"	0' - 8"	0' - 8"	2' - 4"
48' WING UNIT	10' - 0"	46' - 8"	8' - 3"	22' - 7"	12' - 7"	0' - 8"	0' - 8"	2' - 8"
	12' - 0"	46' - 8"	10' - 3"	22' - 7"	14' - 7"	0' - 8'	0' - 8"	2' - 8"
	14' - 0"	46' - 8"	12' - 3"	22' - 7"	16' - 7"	0' - 8"	0' - 8"	2' - 8"
	16' - 0"	46' - 8"	14' - 3"	22' - 7"	18' - 7"	0' - 8"	0' - 8"	2' - 8"
	20' - 0"	46' - 8"	18' - 3"	22' - 7"	22' - 7"	0' - 8"	0' - 8"	2' - 8"

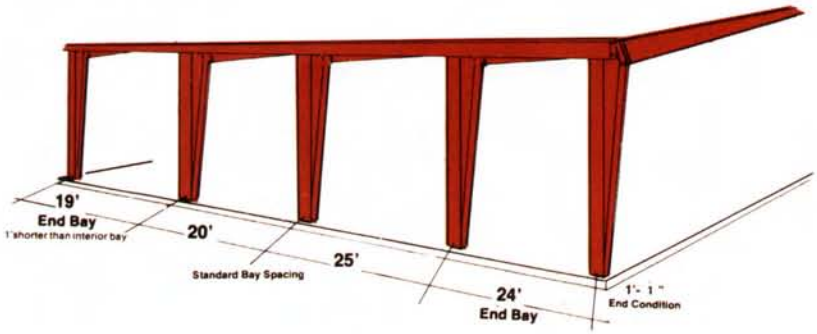
CLEARANCE DIMENSIONS ARE APPROXIMATE AND MAY CHANGE WITH LOADING CONDITION AND BAY SPACING.

DEAN PART NOMENCLATURE

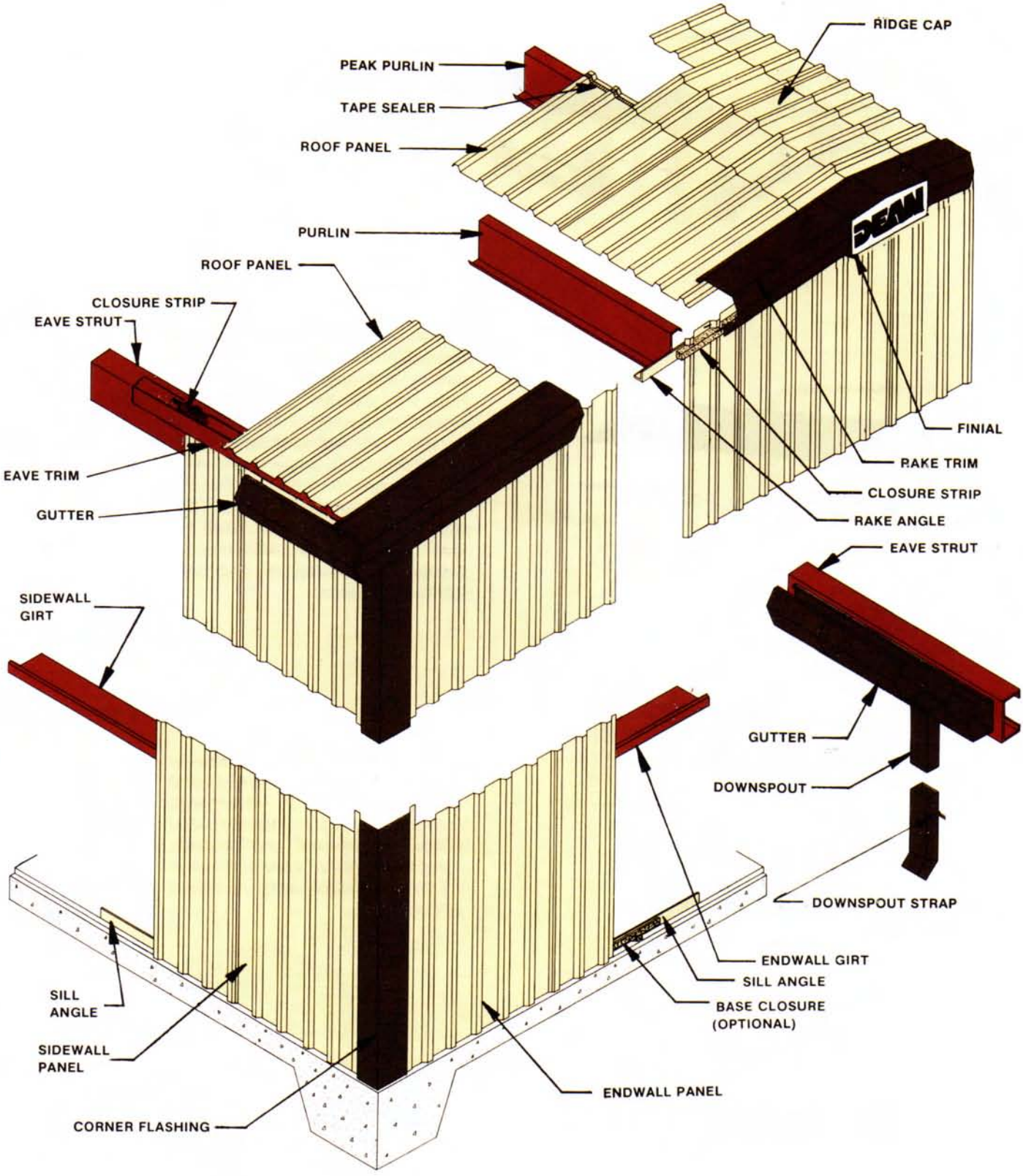


Bay Spacing

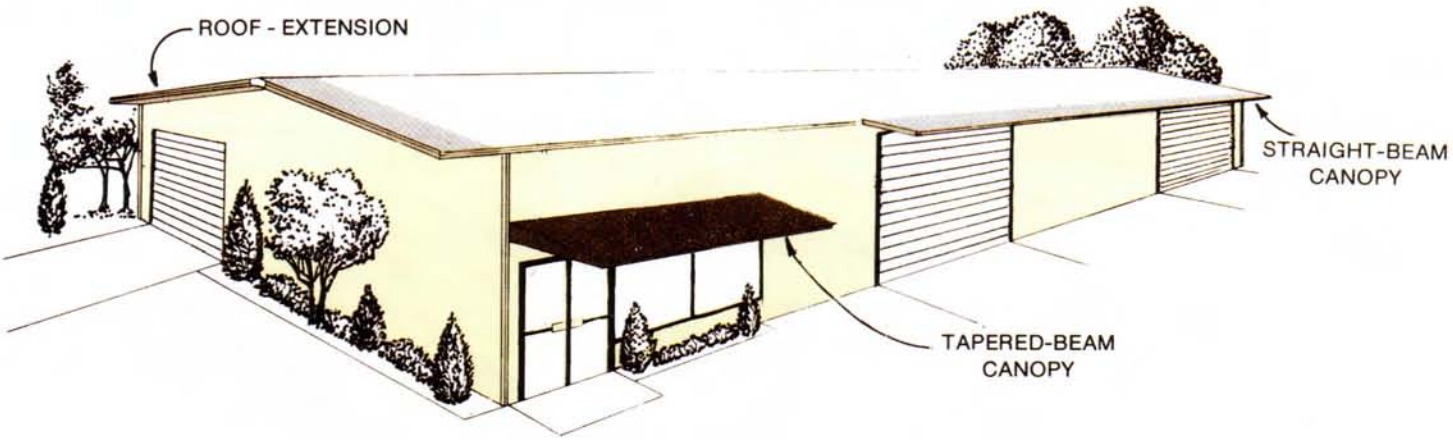
Bay spacing is defined as the center of sidewall column to center of sidewall column. Standard spacing is available in 20', 25' and 30'. End bays are typically 1' shorter than interior bays. The distance from the center of the end bay column to the outside girt line is 1'-1". The distance from the end frame to the outside edge of concrete is 1'-1" when using base trim or 1'-2½" when using a formed sheet ledge.

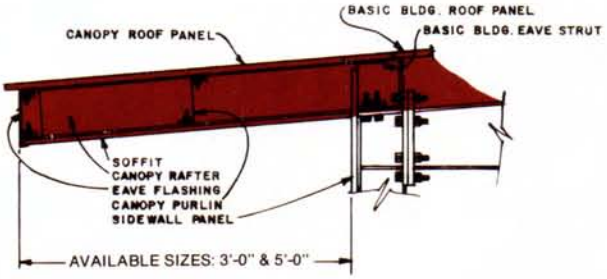


DEAN PANELS & FLASHING

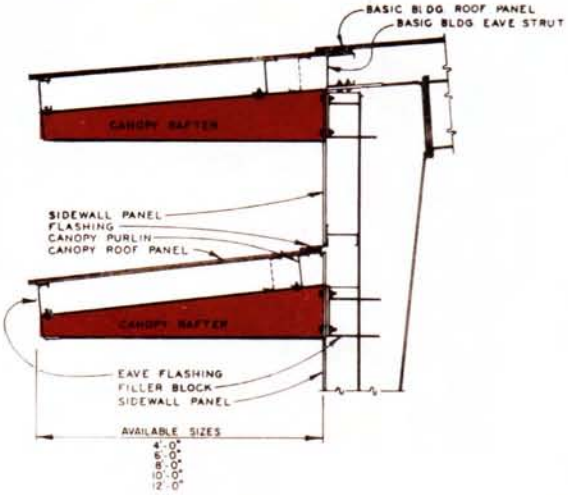


CANOPIES & ROOF EXTENSIONS

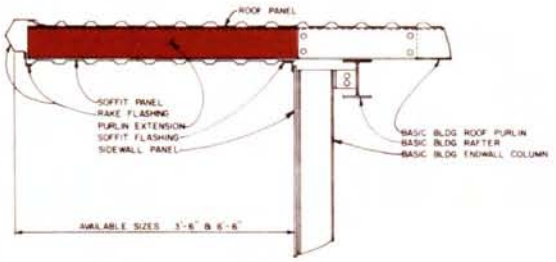




The **straight beam canopy**, available in 3′ and 5′ dimensions, can be applied to all Dean buildings. The canopy is mounted on the sidewall and follows the slope of the roof. Straight beam canopies cannot be applied below the eave or used for endwall installations. The canopy forms a harmonious unbroken line from the peak providing an aesthetically pleasing appearance. Optional soffit is available.



The **tapered beam canopy** is a more versatile and functional canopy offered in 2′ increments from 4 to 12 feet. It has the capabilities of sidewall and endwall attachment at or below the eave. It is also available with or without soffit panels.



Roof extensions are a continuation of the roof over the endwall. They are offered in standard 3′-6″ and 6′-6′ projections and have optional soffit panels.

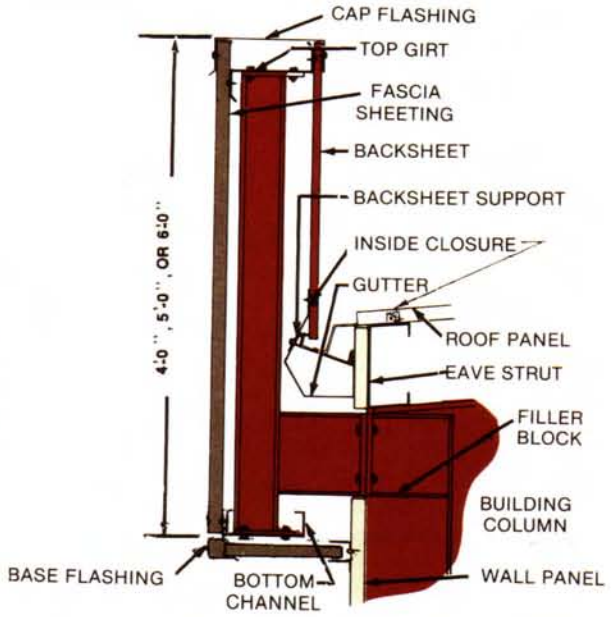
Fascias

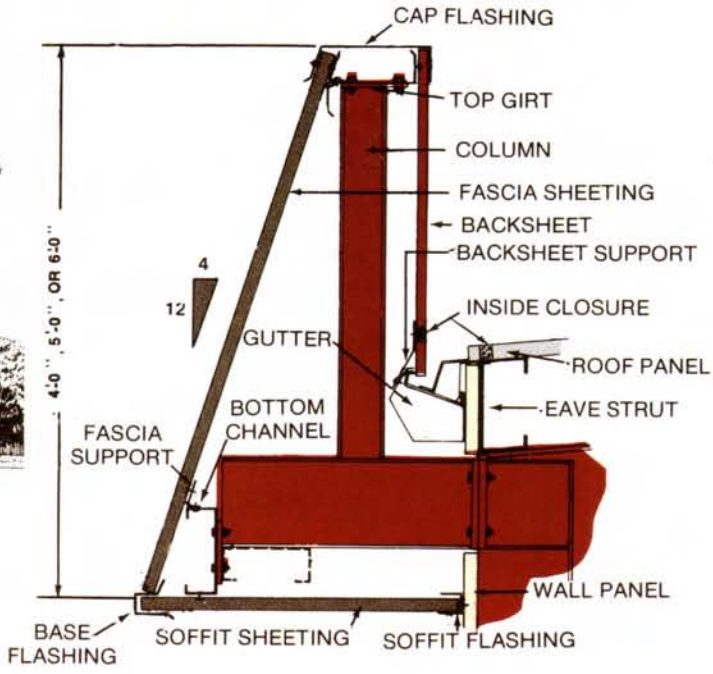
Dean offers both vertical and sloped fascia systems to achieve a variety of distinctive designs with modern accents.

Fascias are available in 4′, 5′ or 6′ heights. The projection of all vertical fascias is 12″. The projection of the 4′ sloped fascia is 29″. The 5′ sloped fascia projects 33″ whereas the projection of the 6′ sloped fascia is 37″. The 4′ fascia will cover the peak of buildings up to 50′ wide. The 5′ fascia can be used on buildings up to 80′ wide while the 6′ fascia is adequate for buildings up to 100′ in width.

Dean fascias have 8″ deep light gage sections connected to framing members that are bolted to the columns. Fascias are fully backsheeted to protect framing members from the elements.

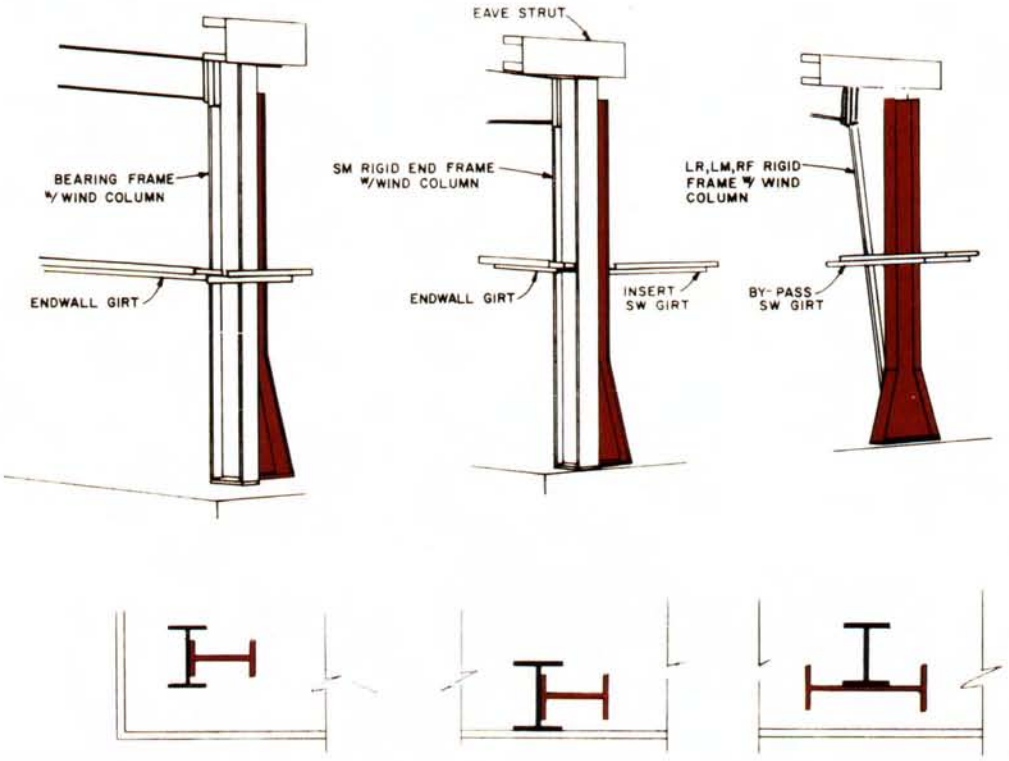
Gutters, soffit panels and backsheets are not recommended in areas that are subjected to snow loads.





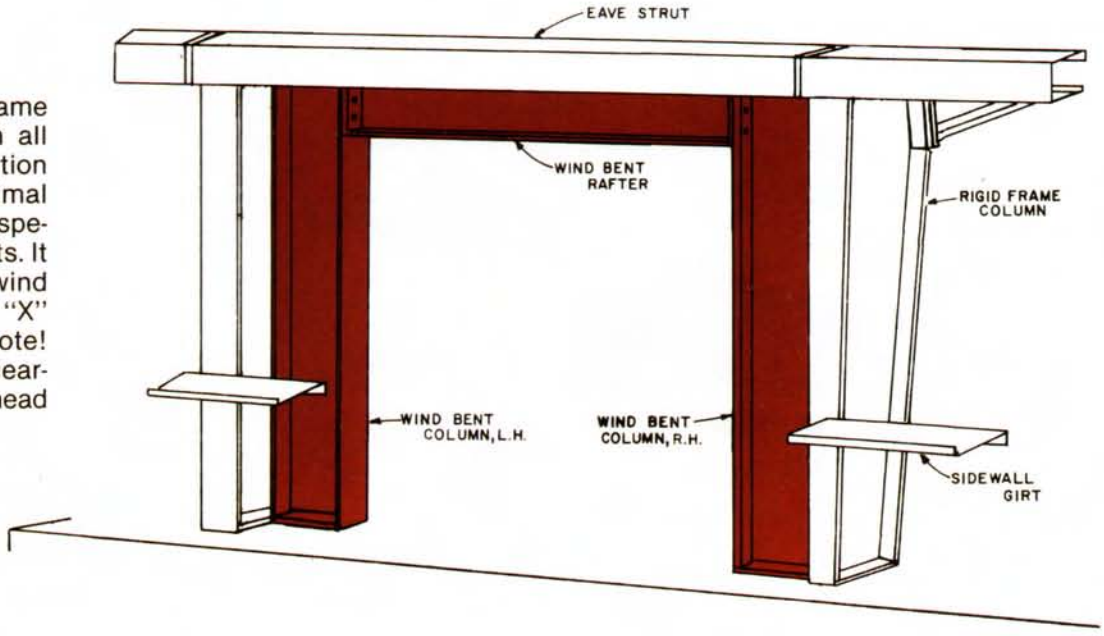
Wind Column

Wind columns are used to transfer the endwall wind forces to the concrete slab in buildings that cannot be "X" braced by cables or lack enough sheeting to provide diaphram strength. They are fixed base columns that require special concrete design in order to function properly. The number required per side depends upon the building width, height and design wind load.



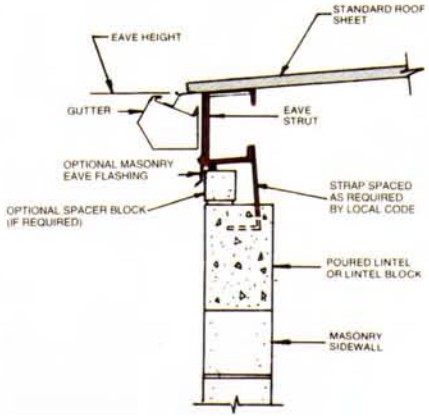
Wind Bents

A wind bent is a rigid frame support that can be used in all Dean buildings with the exception of the SM and WU series. Minimal foundation requirements are specified to support the wind bents. It is an alternative to using wind columns in situations where "X" bracing cannot be applied. Note! Reduced width and height clearances may restrict some overhead door sizes.



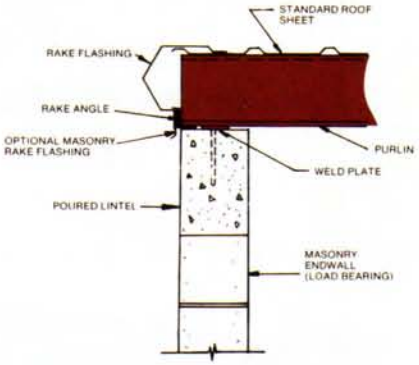
MASONRY WALLS

SIDEWALL DETAIL

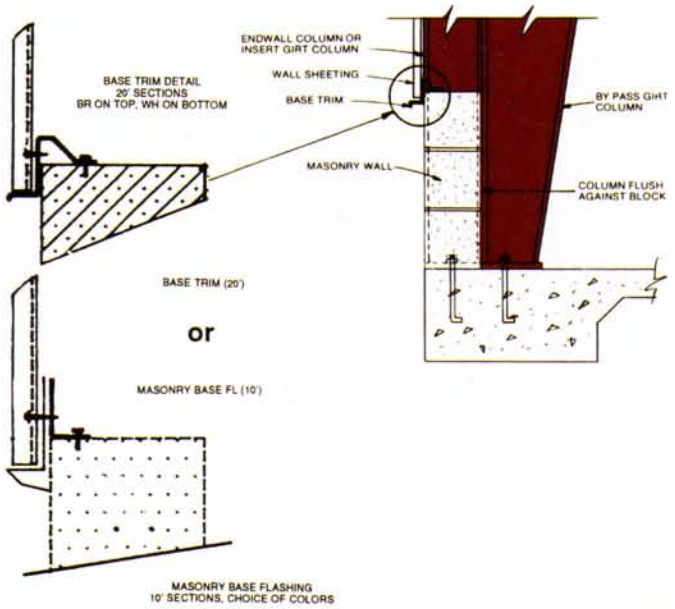


A Dean roof system can be readily adapted to buildings requiring a masonry wall(s). These pre-engineered roof systems require less construction time and maintenance work than conventional or flat roofs.

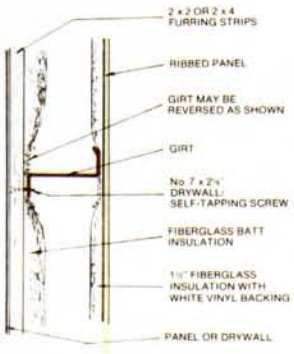
ENDWALL DETAIL

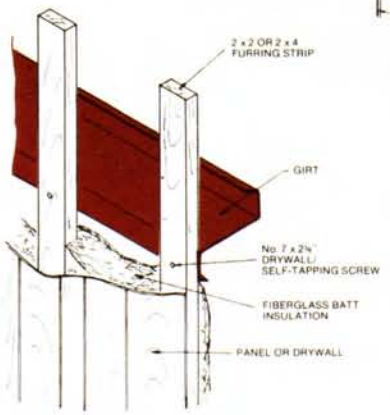


PARTIAL MASONRY WALLS

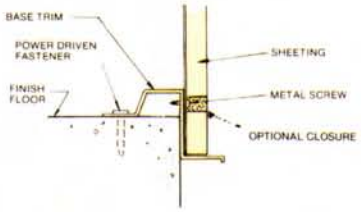


INTERIOR FRAMING

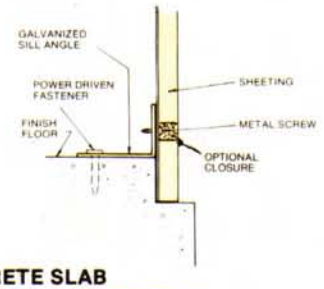




BASE DETAILS



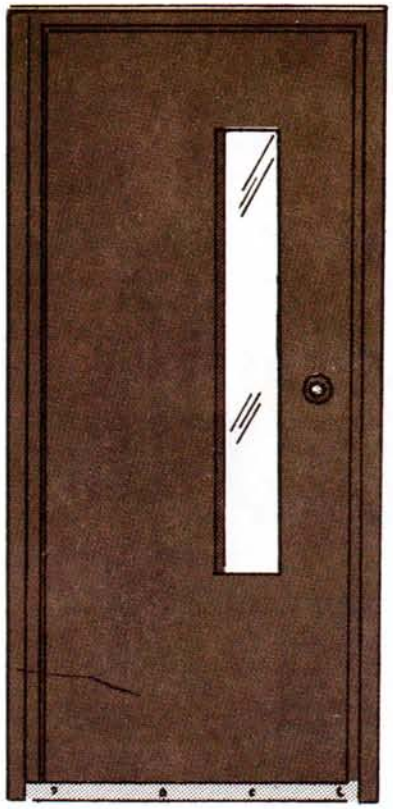
CONCRETE SLAB WITHOUT FORMED SHEET LEDGE (OPTIONAL)



CONCRETE SLAB WITH FORMED SHEET LEDGE DGE **(STANDARD)**

ACCESSORIES

1



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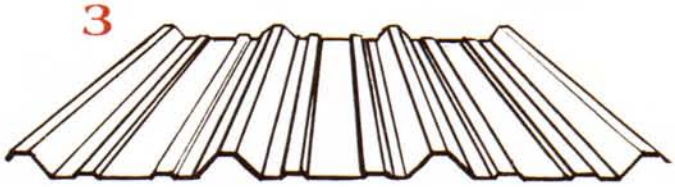

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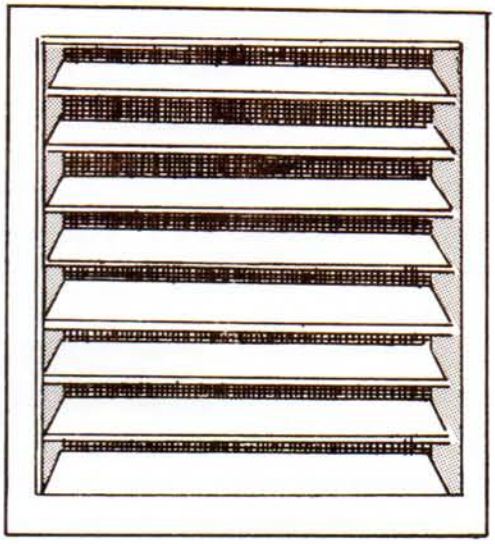

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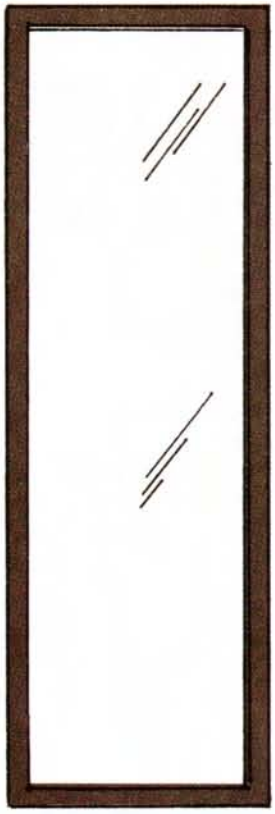

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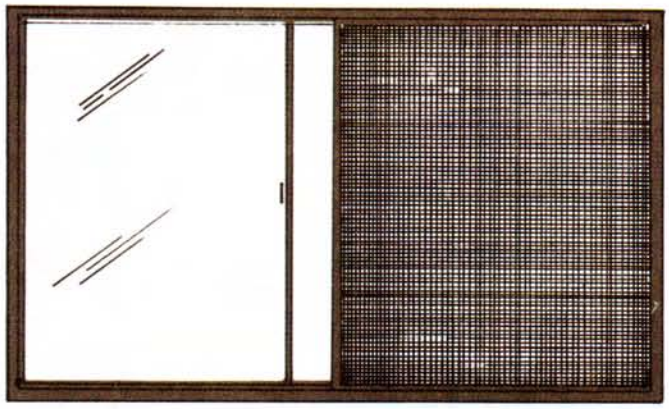

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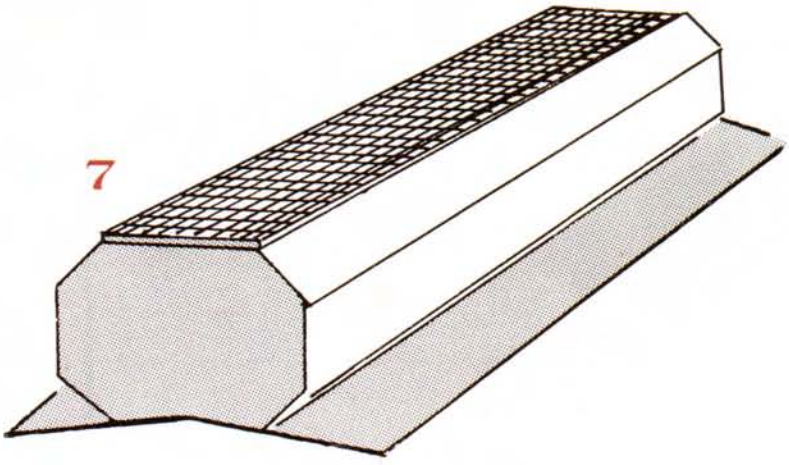

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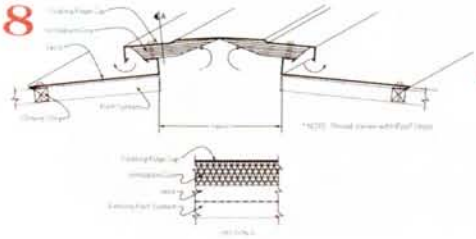

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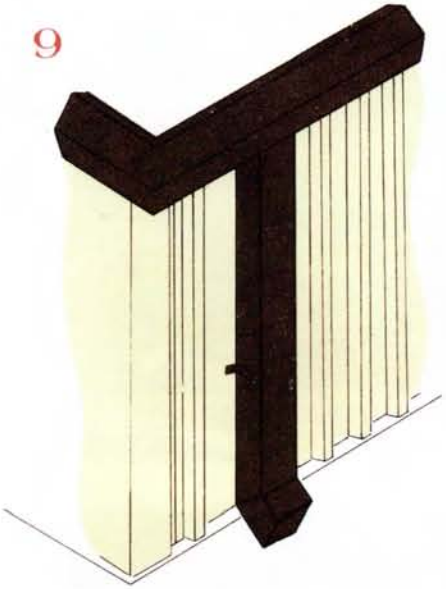

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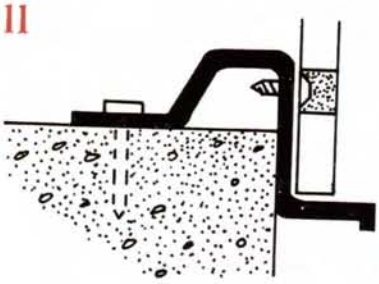
11



1 Walkdoors

Hollow metal walkdoors are available in either a 3'x7' or 6'x7' insulated galvanized sheet with grey primer or 3'x7', 4'x7' and 6'x7' embossed galvanized sheet with white primer and optional tempered glass narrow light.

2 Locksets

For the maximum in security. All walkdoors are provided with a utility lockset made from U.S. 32D stainless steel with a satin finish appearance. Optional lever locksets are available to meet A.D.A. requirements.

3 Skylights

Skylights are constructed from glass fiber reinforced polyester plastic panels to match Dean's roof configuration. RT skylights measure 3'x11'. RT skylights are available with manufacturer 20 year guarantee. The skylights are heavy grade 8 oz. per sq. ft. for long life and durability.

4 Louvers

A complete line of Galvalume™ and white louvers are available in 2'x2', 3'x3' and 4'x4'. Overlapping fixed blades allows for maximum airflow.

5 Accent Windows

Contemporary full length bronze aluminum accent tempered, tinted glass windows are available in a 2'x7' dimension. Trim and panel color is bronze baked on enamel finish.

6 Windows

Screened horizontal sliding windows are offered in bronze enamel paint. Window dimensions are either 3'x3' or 6'x3' and are self flashing.

7 Monovents

Monovents are designed to be independent or continuous and are manufactured in ten foot lengths with either nine inch or twelve inch throats. The Galvalume™ or white monovents are offered with birdscreen and optional dampers.

8 Lo-Profile Floating Vents

Designed specifically for standing seam roofs to offer a pleasing and efficient means of ventilating. Works well with RT panels and as a retro-fit vent. Base rating of 450 CFM. 10' lengths in Galvalume™ or white.

9 Gutters and Downspouts

Dean's gutters and downspouts are designed to blend with aesthetic accent lines of the building's profile. Each is rolled in 20' sections for easy erection and fewer seams. Gutters are 4-1/2" deep x 5" wide and downspouts are 4"x5".

10 Framed Openings

Framed openings for overhead doors from 8'x8' to 20'x16' are available with 8", 14 gauge painted channels (or optional galvanized) for jambs and headers.

11 Base Trim (optional)

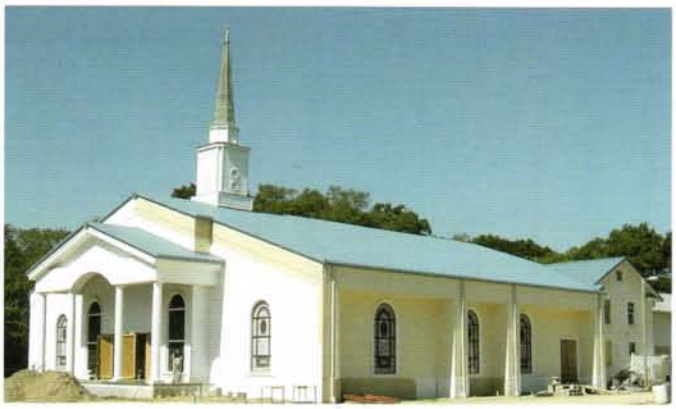
As an alternative to forming a 1-1/2" sheet ledge in the concrete, Dean offers an 18 gauge roll formed base trim. Available in 20' lengths that are prepainted in bronze.

Slide doors

Single or double sliding doors are available from 8'x 10'to 16'x 14'. Slide doors are manufactured in the same profile and color of the building. Opening dimensions are approximately one foot shorter in height and 3" less in width. Consult the chart for specific sizes.

SLIDE DOOR CLEARANCE OPENINGS

DOOR WIDTH	8'	10'	12'	14'	16'
CLEAR WIDTH	7'9"	9'9"	11'9"	13'9"	15'9"
DOOR HEIGHT	8'	10'	12'	14'	16'
CLEAR HEIGHT	7'	9'	11'	13'	15'

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