The following information represents Valley Steel Construction (VSC) standards and are intended to provide general guidelines for VSC product use. Special requirements must be specified on the Quote and Order Documents.

Noce: In keeping with a program of connuous and never-ending improvement all informaon contained herein is subject to change without noce.

LOADS AND CODES

The Project Architect or the Engineer of Record is responsible for specifying Design Loads in accordance with the governing Building Code, local requirements (if any), and special end use requirements. The Valley Steel Construction Engineer does NOT serve as the Engineer of Record. Loads specified will be applied in general accordance with the engineering formulas of the specified code. Code requirements for fire, egress, ADA compliance, and other considerations are the responsibility of the buyer.

DESIGN SPECIFICATIONS

- MBMA Metal Building Systems Manual, Latest Edition.
- AISI North American Specification for the Design of Cold-Formed Steel Structural Members (AISI S100), Latest Edition.
- AISC Specification for Structural Steel Buildings, Latest Edition.
- CSA Design of Steel Structures (S16), Latest Edition.
- AWS D1.1, D1.3 and D1.8 Structural Welding Codes, Latest Editions.
- CSA Welded steel construction (metal arc welding) (W59), Latest Edition.

PRIMARY FRAMING SPAN RECOMMENDATIONS BY FRAME TYPE

PRIMARY FRAME TYPE	WIDTH	EAVE HT	SPAN	GIRT CONDITION	BAY
TAPERED BEAM (TCG)	20’ – 70’	10’ – 30’	CLEAR	INSET	20’ – 30’
RIGID FRAME (RCG)	20’ – 150’	10’ – 30’+	CLEAR	BY-PASS	20’ – 50’
Truss Frame (Clear span)	80’ – 250’	20’ – 40’+	CLEAR	BY-PASS	20’ – 50’
Truss Frame (Modular)	100’ – 400’	20’ – 40’+	50’-200’	BY-PASS	20’ – 50’
RF W/COL (RMG)	70’ – 400’+	10’ – 30’+	40’ – 80’ +	BY-PASS	20’ – 50’
SINGLE SLOPE (RCS)	20’ – 150’	10’ – 30’+	CLEAR	BY-PASS	20’ – 50’
SS W/COL (RMS)	20’ – 215’	10’ – 30’+	40’ – 80’ +	BY-PASS	20’ – 50’
LEAN-TO (LCS)	20’ – 60’	10’ – 30’+	CLEAR	INSET	20’ – 30’

ENDWALLS

Standard: Post and beam, non-expandable, using cold-formed material. Built-up and wide flange materials are also available and are employed when specifically stated on the Order Documents, when roof joists are needed, or when loads dictate that cold-formed material is not allowable.

Oponal: Expandable or Non-Expandable Rigid Frames with wind columns.

INTERMEDIATE WIND COLUMNS

Intermediate wind columns are required for sidewall bays over 35' wide, though they may be more economical in the 30'-40' range than 12" deep girts.

WIND BRACING

- Rod or cable only in the roof. Rod is standard with buildings using purlins.
- Rod, cable, hot-rolled angles, or portal frames are permited in wall bracing applicaons, depending on loads and building usage requirements.
- Fixed base corner columns may also be employed in some cases.
- Rod bracing is standard in walls.
- Buildings less than 70' may only require that one sidewall be braced, ulizing torsional bracing methods.
- Rod is standard bracing in the wall for post and beam end walls.

PURLINS

To 32' Bays - 8 or 10 inch Z purlins as required by design.

Over 32' Bays - Bar joists w/ welded connecon to raers. (Bolted connecons oponal.) 12" Z purlins are available for bays through 40', based on loading, and may be more economical than roof joists. Consult engineering team for assistance.

GIRTS

To 32' Bays - 8 or 10 inch Z girts as required by design.

Over 32' Bays - Standard is to use intermediate wind columns to shorten the girt span. 12" Z girts are available for bays through 40', based on loading, and may or may not be more economical than intermediate wind columns. Consult engineering team for assistance.

METAL ROOF SYSTEMS

26 gage Valley Steel Classic Roof™ Through-Fastened Roof Panel

- Structural Fasteners — 12 - 14 X 1 1/4" Self Driller w/Sealing Washer
- Lap Fasteners — 12 - 14 X 3/4" Self Driller w/Sealing Washer

24 gage Valley Steel CFR™ Standing Seam Trapezoidal Rib Roof Panel

- Clip Fasteners at Purlins 1/4 - 14 X 1 1/4" Self-Driller
- Clip Fasteners at Joists 12 - 24 X 1 1/2" Self Driller
- Thermal Blocks Oponal (required for buildings ulizing tall panel clips)

24 gage Valley Steel VR16 II™ Standing Seam Vercal Rib Roof Panel

- Clip Fasteners at Purlins 12 - 14 X 1 1/4" Self Driller
- Clip Fasteners at Joists 12 - 24 X 1 1/2" Self Driller
- Thermal Blocks Oponal (required for buildings ulizing tall panel clips)

26 gage Valley Steel HR3 — High Rib Profile Insulated Roof Panel

- Structural Fasteners 1/4 - 14 X Varies Self Driller w/Sealing Washer
- Lap Fasteners 1/4 - 14 X 7/8" Self Driller w/Sealing Washer

26 gage Valley Steel SR2 — Insulated Standing Seam Roof Panel

- Clip Fasteners at Purlins 1/4 - 14 X 2" Self Driller
- Clip Fasteners at Joists 1/4 - 14 X 2" Self Driller

METAL WALL SYSTEMS AND INSULATED WALL SYSTEMS

26 gauge **Valley Steel** Classic Wall™ profile Wall Panel

26 gauge **Valley Steel** Reverse Classic™ profile Wall Panel

26 gauge **Valley Steel** Accent Wall™ profile Wall Panel

- Structural Fasteners - 12 - 14 X 1 1/4" Self-Driller
- Lap Fasteners - 12 - 14 X 3/4" Self-Driller

26 gage Valley Steel Double Mesa Profile (DM40) Insulated Wall Panel

26 gage Valley Steel Heavy Embossed (HE40) Insulated Wall Panel

26 gage Valley Steel Striated (ST40) Insulated Wall Panel

26 gage Valley Steel AdobeTexture™ (HE40A) Insulated Wall Panel

- Hidden Structural Fasteners # 14 X Varies Self Driller

TRIM

Note: All trim, with the excepon of the “Standard” base trim, is fabricated out of 26 gauge material.

Corner Trim - Roll formed trim in 20’ lengths.
Color to match wall panel.
Standard **Valley Steel** colors available at no extra cost.

Guter - Roll formed guter in 10’ and 20’ lengths.
Color is Polar White or Burnished Slate as standard. Standard **Valley Steel** colors available at no extra cost.

Downspouts - Roll formed downspouts.
Color to match wall panel as standard. All standard colors available at no extra cost.
Special color downspouts are press-broke.

Rake Trim - Roll formed profile in 10’ and 20’ lengths to match guter profile. Color is Polar White or Burnished Slate as standard. Standard **Valley Steel** colors available at no extra cost.

Standard Base Trim - Roll formed 18-gauge profile.
Color is Polar White or Burnished Slate as standard.

Oponal Base Trim - Press-broke profile.
All Valley Steel standard colors available.

Framed Opening Trim - Press-broke profile.
All Valley Steel standard colors available.

ACCESSORIES

For specific informaon, please refer to the Accessories Secon 8.0 of this manual.

WARRANTIES

- One (1) year standard warranty on all materials.
- Twenty five (25) year wall and roof Silicone Polyester finish warranty.
- Thirty five (35) year wall and roof PVDF finish warranty.
- Twenty five (25) year standard roof Galvalume™ warranty.

- Twenty (20) year roof weather-ghtness warranty is available at addional cost for Valley Steel “CFR”™ Standing Seam Roof