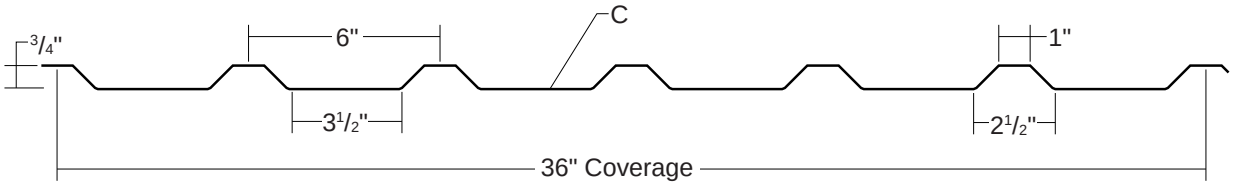
U-PANEL

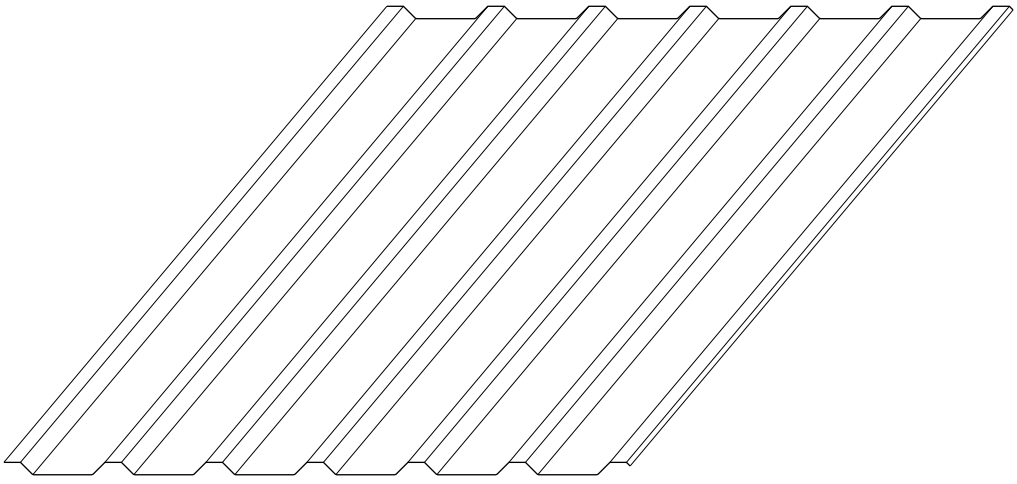
CONDENSED TECHNICAL REFERENCE



ARCHITECTURAL COMMERCIAL INDUSTRIAL PANEL | **DIRECT FASTEN** | **36" COVERAGE** | **WALL PANEL** | **OPEN FRAMING OR SOLID SUBSTRATE**

PANEL OVERVIEW

- Finishes: Kynar 500 (PVDF), MS Colorfast45®, and Acrylic Coated Galvalume®
- Gauges: 26ga and 24ga standard, 22ga optional
- 36" panel coverage, 3/4" rib height
- Applies over open framing or solid substrate
- Exposed fastened metal building panel
- Trapezoidal rib on 6" centers
- Wall panel



TESTING

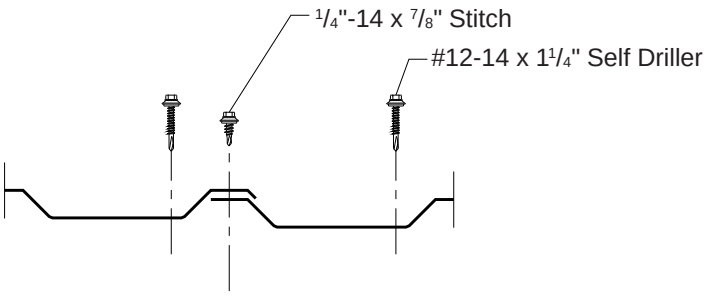
- UL 2218, Class 4 Impact Resistance
- UL 790, Class A Fire Resistance Rating

metal sales
manufacturing corporation

U-PANEL

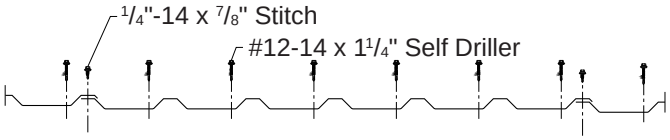
CONDENSED TECHNICAL REFERENCE

ATTACHMENT DETAIL



FASTENING PATTERN

Ends and Field of Panel



GENERAL INFORMATION

▶ **Substructure**
U-Panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. To avoid panel distortion, use a properly aligned and uniform substructure.

▶ **Coverage**
U-Panels are available in 3/4" rib height with a coverage width of 36".

▶ **Length**
Minimum factory cut length is 5'-0". Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult Metal Sales for recommendations.

▶ **Fasteners**
The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.
NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.

▶ **Availablity**
Finishes: Acrylic Coated Galvalume®, MS Colorfast45®, or various Kynar 500 (PVDF) colors.
Gauges: 26ga and 24ga standard, 22ga optional

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)											
Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward (Stress / Deflection) Load						Outward Uplift (Stress) Load					
				Ixx In^4/ft	Sxx In^3/ft	Ixx In^4/ft	Sxx In^3/ft	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'
26	36"	80	0.87	0.0183	0.0342	0.0123	0.0292	198	90	51	33	23	17	229	104	59	38	26	19
24	36"	50	1.13	0.0270	0.0515	0.0187	0.0462	259	118	67	43	30	22	228	116	69	46	32	24
22	36"	50	1.45	0.0367	0.0732	0.0267	0.0671	374	171	97	62	43	32	312	161	97	64	45	34

1. Theoretical section properties have been calculated per AISI 2001 "Specification for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase in uplift.

metal sales manufacturing corporation

Kent, WA (800) 431-3470
Temple, TX (800) 543-4415
Longmont, CO (800) 289-7663
Antioch, TN (800) 251-8508
Woodland, CA (800) 759-6019
Rogers, MN (800) 328-9316
Spokane, WA (800) 572-6565
Jefferson, OH (800) 321-5833
Rock Island, IL (800) 747-1206
Sellersburg, IN (800) 999-7777
Jacksonville, FL (800) 394-4419
Orwigsburg, PA (800) 544-2577
Independence, MO (800) 747-0012
Fontana, CA (800) 782-7953
Anchorage, AK (866) 640-7663
Bay City, MI (888) 777-7640
Detroit Lakes, MN (888) 594-1394
Mocksville, NC (800) 228-6119