MARINO WARE

QUALITY AND SERVICE COUNT.

DRYWALL FRAMING SYSTEM
LATH & PLASTER PRODUCTS
BEADS & TRIMS

www.marinoware.com

MARINO\WARE
QUALITY AND SERVICE COUNT.

GENERAL INFORMATION

QUALITY AND SERVICE COUNT

Marino\WARE is proud to present this brochure describing our line of Interior Drywall Steel Products, as well as Plaster Steel Products and Vinyl and Paper-Faced Metal Beads and Trims. These components, complemented by our structural framing line, complete **Marino\WARE**'s family of steel framing products.

Marino\WARE stands committed to product quality. Our steel components are furnished in uniform lengths and consistent formation. Pallets and bundles are properly packages and consistently marked for easy identification.

Marino\WARE products are manufactured using steel meeting industry standards. Hardness and ductility are monitored to assure the user ease in fabrication and penetration of screw fasteners.

To service the customer, **Marino\WARE** maintains a large inventory of both finished product and coil steel allowing us to readily satisfy requests for special bundle sizes and custom order lengths. Our fleet of trucks assures the buyer prompt deliveries, in many instances, next day delivery. Our experienced internal and external sales personnel, coupled with an extensive distribution network, make **Marino\WARE** the obvious choice for your project, regardless of location and size.

Let **Marino\WARE** furnish your next framing project. Quality steel products, competitive pricing, excellent service, prompt deliveries and technical assistance are all available to you.

WARRANTY AND LIMITATIONS

All products presented herein are warranted to the buyer to be free from defects in material and workmanship.

The foregoing warranty is non-assignable and in lieu of and excludes all other warranties not expressly set forth herein. Whether expressed or implied by operation of law or otherwise, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. All details and specifications presented herein are intended as a general guide for the use of **Marino\WARE** Interior Drywall Steel Framing Systems. These products should not be used without evaluation by a qualified engineer or architect to determine their suitability for a specific use. **Marino\WARE** assumes no responsibility for failure resulting from use of its details or specifications; or for failure resulting from improper application or installation of these products.

MATERIALS

Interior framing products formed from steel meet the requirements of the current edition of ASTM specification C 645, the industry standard for non-structural steel studs. To assist the specifier and buyer, the following information summarizes the contents of the standards referenced in ASTM C 645 and ASTM C 754.

The applicable ASTM standards referenced within ASTM C 645 include ASTM A 653, A 568, and C 1002. Additionally, ASTM C 645 lists the AISI "Specification for the Design of Cold-Formed Steel Structural Members" as an applicable document. Discussion of each follows:

ASTM A 653 AND ASTM A 924

These specifications describe the general requirements for steel as well as the general coating requirements for steel which is zinc-coated (galvanized) or zinc-iron alloy-coated (galvannealed) by the hot-dipped process. These specifications replace ASTM A 446 and ASTM A 525. Products manufactured in accordance with ASTM C 645 are required to have a minimum G-40 coating or equivalent coating.

ASTM A 568

Outlines the general requirements for steel sheets in coils and cut lengths. It applies to steel described as carbon steel and high strength, low alloy steel furnished as hot rolled or cold rolled sheet.

ASTM C 754

This specification describes the installation of products designed to receive screw-attached gypsum panel products and is limited to products manufactured in accordance with ASTM C 645.

ASTM C 1002

This specification regulates steel self-piercing screws used for the attachment of gypsum panel products and metal plaster bases.

ASTM C 1047

This specification covers accessories used in conjunction with assemblies of gypsum wallboard and gypsum veneer plaster to protect edges, corners and to provide architectural features.

ASTM C 847

This specification covers sheet lath, expanded metal lath, diamond mesh, flat and self-furring, and rib lath, 1/8" and 3/8" (3.2 and 9.6mm), all with or without backing and designed to be used as a base for gypsum or portland cement plaster.

GOVERNING LAW

All issues arising in connection with your order and all transactions associated with it shall be interpreted according to the laws of the State of New Jersey. All actions or other proceedings arising out of such issues shall be brought only in Superior Court, State of New Jersey, County of Essex, or United States District Court for the District of New Jersey. No action may be brought more than one year after accrual of the cause of action therefore.

AISI Specifications for the Design of Cold-Formed Steel Structural Members

In addition to the structural design code for cold-formed steel members, the AISI specification also addresses materials used in their production.The AISI outlines provisions for the suitability of steel not pre-qualified per ASTM Standards. These provisions include:

A. Conformation to the chemical and mechanical requirements of one of the listed specifications or other published specifications which established its properties and suitability, and;
B. Ductility requirements to assure the steel's workability.

GENERAL INFORMATION

Steel Thickness:

Product		Design		Minimum		ASTM C645
Gauge	Mils	(in.)	(mm.)	(in.)	(mm.)	Color Code
25	18	.0188	.4775	.0179	.4550	Unmarked
22	27	.0283	.7188	.0269	.6830	Black
20	30	.0312	.7925	.0296	.7518	Pink

Finish:

Galvanized in accordance with ASTM A653. Products will be furnished with a G-40 or equivalent coating if specified and ordered to be in conformance with ASTM C645. These specifications describe the general coating requirements for steel which is zinc coated (galvanized), or zinc-iron alloy coated (galvannealed) or aluminum-zinc alloy coated (galvalume) by the hot-dipped process.

Grades of Steel:

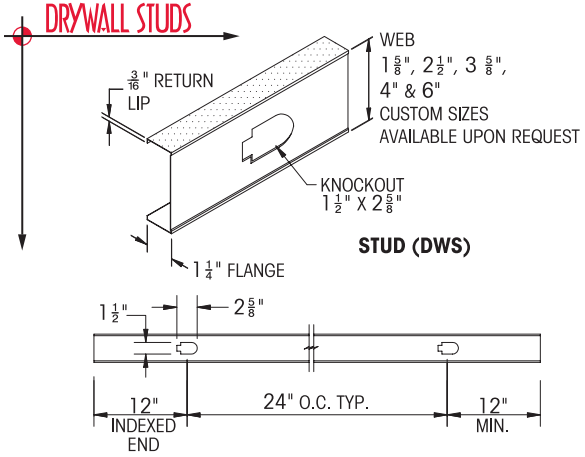
25, 22 and 20 gauge studs and tracks
Fy (min) = 33 KSI

MARINO\WARE
QUALITY AND SERVICE COUNT.

SYSTEM COMPONENTS

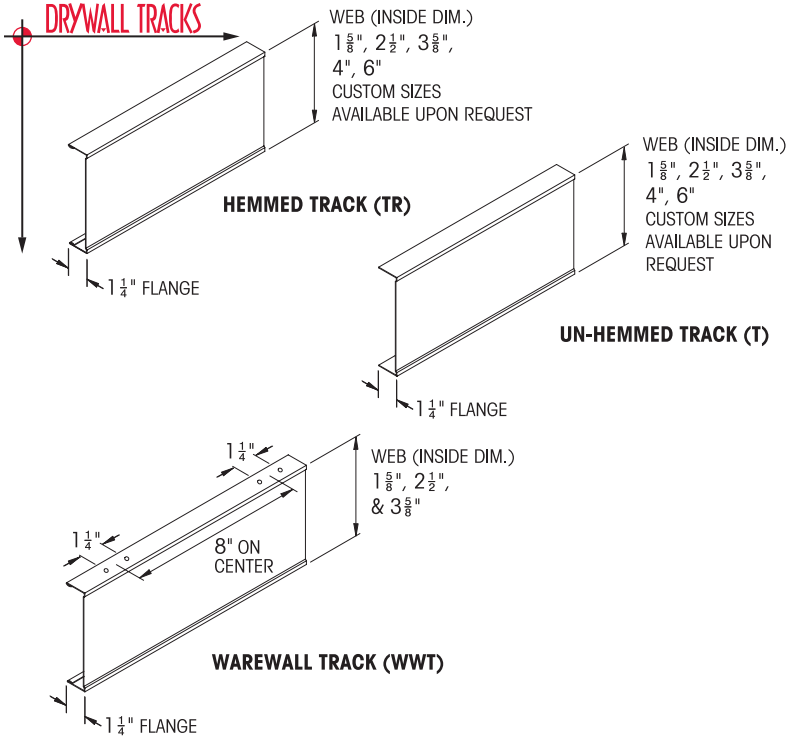
TABLE OF CONTENTS

DRYWALL STUDS



STUD (DWS)

DRYWALL TRACKS



HEMMED TRACK (TR)

UN-HEMMED TRACK (T)

WAREWALL TRACK (WWT)

STUD

Studs serve as a general all purpose framing component used in a variety of applications including gypsum wallboard, plaster partitions, ceilings, column enclosures, and miscellaneous interior wall framing.

TRACK

Track is used as a closure for interior stud assemblies, head and sill conditions, solid blocking for bridging conditions, miscellaneous struts, kickers, etc.

WEB KNOCKOUT SIZE AND LOCATION

MARINO\WARE studs are manufactured with knockouts in the web to accommodate mechanical and electrical trade installation. The first knockout is provided 12″ from the indexed end and the intermediate knockouts are placed at 24″o.c. intervals. Unpunched studs are available upon request.

C-STUDS (DWS)

M\W	GAUGES	FLANGE	WEB	RETURN LIP
DWS	20, 22 & 25	$1\frac{1}{4}$"	$1\frac{5}{8}$" - 6"	$\frac{3}{16}$"

TRACK (TR, T, WWT & DT)

M\W	GAUGES	FLANGE	WEB
HEMMED	25	$1\frac{1}{4}$"	$1\frac{5}{8}$" - 6"
UN-HEMMED	20, 22 & 25	$1\frac{1}{4}$"	$1\frac{5}{8}$" - 6"
WAREWALL	20 & 25	$1\frac{1}{4}$"	$1\frac{5}{8}$" - $3\frac{5}{8}$"
DEFLECTION	20, 22 & 25	2"	$1\frac{5}{8}$" - 6"

PACKAGING (STUDS)

STUD SIZE	25 GAUGE Pieces/Skid	22 & 20 GAUGES Pieces/Skid
$1\frac{5}{8}$"	720	360
$2\frac{1}{2}$"	540	360
$3\frac{1}{2}$" *	360	300**
$3\frac{5}{8}$"	360	300**
4"	360	240***
6"	180	180****

* Subject to minimum order quantities
** 18' & longer furnished 240 pieces/skid
*** 18' & longer furnished 180 pieces/skids
**** 18' & longer furnished 120 pieces/skids

PACKAGING (TRACKS)

TRACK SIZE	25 GAUGE 1-1/4" FLANGE Pieces/Skid	22 & 20 GAUGE 1-1/4" FLANGE Pieces/Skid	WAREWALL 1-1/4" FLANGE Pieces/Skid
$1\frac{5}{8}$"	720	720	720
$2\frac{1}{2}$"	540	540	540
$3\frac{1}{2}$" *	360	360	360
$3\frac{5}{8}$"	360	360	360
4"	360	360	360
6"	180	180	180

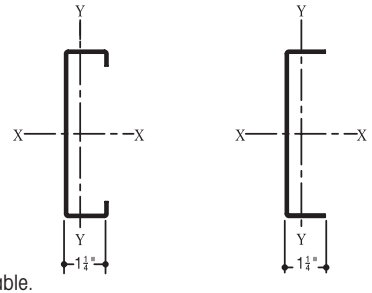
* Subject to minimum order quantities
Flanges are toed-in slightly to assure friction fit of studs.

MARINO\WARE
QUALITY AND SERVICE COUNT.

STRUCTURAL PROPERTIES

SYMBOLS AND DEFINITIONS:

Ixx	Moment of inertia of the gross section about the X-X axis (strong axis).
Rx	Radius of gyration of the gross section about the X-X axis.
Iyy	Moment of inertia of the gross section about the Y-Y axis (weak axis).
Ry	Raidus of gyration of the gross section about the Y-Y axis.
Ixx	Moment of inertia for deflection calculations based on "Procedure 1 for Deflection Determination" of the 1996 AISI Specification.
Sxx	Effective section modulus about the X-X axis (strong axis) Stress=Fy.
Ma	Allowable Bending Moment - Based on the effective section modulus and the allowable stress including the strength increase from cold-work of forming (AISI 7.2) where applicable.
Ycg	Maximum distance from the outside of the compression flange to the center of gravity of the effective section.
J	St. Venant Torsional Constant.
Cw	Torsional warping constant.
Xo	Distance from the shear center to the centroid along the principal X-axis.
Ro	Polar radius of gyration about the centroidal principal axis.
Beta (β)	$1-(Xo/Ro)^2$



SECTION PROPERTY TABLE NOTES:

1. The centerline bend radius is the greater of 2 times the design thickness or 3/32".
2. Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius.
3. Hems on non-structural track sections are ignored.
4. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
5. Tabulated gross properties are based on the full-unreduced cross section of the studs, away from punchouts.
6. For deflection calculations, use the effective moment of inertia.
7. Fy (minimum) = 33 KSI
8. The web height to thickness ratio of the section exceeds 200. Stud to track attachments required. Use (2) screws, (1) each side. Web stiffeners required at all intermediate support locations.

SSMA Product Identification

Marino\WARE is a member of the Steel Stud Manufacturers Association (SSMA.COM). Marino\WARE meets and exceeds all product requirements set forth by SSMA.

All SSMA products have a four part identification code which identifies the size (both depth and flange width), style, and material thickness of each member.

Notes:
1. **Stud measured outside to outside dimension.**
2. **Track measured inside to inside dimension.**

SSMA Product Example

600 S 162 – 54

- **54** — Material Thickness: Minimum Base Metal Thickness: 0.054 in = 54 mils (1 mil=1/1000 in.)
- **162** — Flange Width: 1-5/8" = 1.625" ≈ 162 x 1/100 inches
- **S** — Style: S = C Stud or Joist Sections, T = Track Sections, U = Channel Sections & F = Furring Channel Sections
- **600** — Member Depth: 6" = 600 x 1/100 inches

Physical and Structural Properties

Member Physical Properties						Gross Section Properties						Effective Section Properties					Torsional Properties				
M\W Type	SSMA	Flange/ Leg (in.)	Lip (in.)	Design Thickness (in.)	Area ($in.^2$)	Weight (plf.)	Ixx ($in.^4$)	Sxx ($in.^3$)	Rx (in.)	Iyy ($in.^4$)	Ry (in.)	Ixx ($in.^4$)	Sxx ($in.^3$)	Ma (in-k)	Va (lb)	Ycg (in)	J x1000 ($in.^4$)	Cw ($in.^6$)	Xo (in.)	Ro (in.)	ß Beta
1-5/8" Members																					
158DWS25	162S125-18	1 1/4"	0.188	0.0188	0.080	0.270	0.038	0.046	0.686	0.016	0.443	0.034	0.033	0.660	309	0.924	0.009	0.009	-1.061	1.340	0.373
158DWS22	162S125-27	1 1/4"	0.188	0.0283	0.120	0.410	0.056	0.068	0.682	0.023	0.447	0.055	0.051	1.010	526	0.909	0.032	0.013	-1.049	1.327	0.375
158DWS20	162S125-30	1 1/4"	0.188	0.0312	0.131	0.450	0.061	0.075	0.681	0.026	0.441	0.060	0.059	1.160	579	0.894	0.043	0.014	-1.046	1.323	0.376
158T25	162T125-18	1 1/4"	none	0.0188	0.078	0.260	0.042	0.048	0.740	0.013	0.411	0.031	0.026	0.510	309	1.093	0.009	0.007	-0.893	1.230	0.473
158T22	162T125-27	1 1/4"	none	0.0283	0.117	0.400	0.063	0.072	0.735	0.020	0.410	0.050	0.044	0.870	577	1.048	0.031	0.010	-0.886	1.221	0.474
158T20	162T125-30	1 1/4"	none	0.0312	0.129	0.440	0.070	0.079	0.735	0.022	0.409	0.057	0.050	1.000	637	1.038	0.042	0.012	-0.884	1.220	0.475

Physical and Structural Properties

Member Physical Properties						Gross Section Properties						Effective Section Properties					Torsional Properties				
M\W Type	SSMA	Flange/ Leg (in.)	Lip (in.)	Design Thickness (in.)	Area ($in.^2$)	Weight (plf.)	Ixx ($in.^4$)	Sxx ($in.^3$)	Rx (in.)	Iyy ($in.^4$)	Ry (in.)	Ixx ($in.^4$)	Sxx ($in.^3$)	Ma (in-k)	Va (lb)	Ycg (in)	J x1000 ($in.^4$)	Cw ($in.^6$)	Xo (in.)	Ro (in.)	ß Beta
2-1/2" Members																					
212DWS25	250S125-18	1 1/4"	0.188	0.0188	0.097	0.330	0.099	0.079	1.014	0.019	0.439	0.089	0.059	1.170	247	1.391	0.011	0.023	-0.930	1.444	0.585
212DWS22	250S125-27	1 1/4"	0.188	0.0283	0.144	0.490	0.147	0.118	1.009	0.027	0.434	0.144	0.092	1.810	700	1.372	0.039	0.033	-0.919	1.432	0.589
212DWS20	250S125-30	1 1/4"	0.188	0.0312	0.159	0.540	0.161	0.129	1.008	0.030	0.433	0.159	0.104	2.060	851	1.354	0.052	0.036	-0.915	1.429	0.590
212T25	250T125-18	1 1/4"	none	0.0188	0.094	0.320	0.105	0.080	1.057	0.015	0.399	0.079	0.046	0.900	237	1.593	0.011	0.018	-0.781	1.373	0.677
212T22	250T125-27	1 1/4"	none	0.0283	0.141	0.480	0.157	0.119	1.053	0.022	0.398	0.129	0.079	1.560	700	1.519	0.038	0.027	-0.744	1.366	0.679
212T20	250T125-30	1 1/4"	none	0.0312	0.156	0.530	0.173	0.131	1.053	0.025	0.397	0.145	0.090	1.770	851	1.507	0.051	0.030	-0.773	1.365	0.679
3-5/8" Members																					
358DWS25	362S125-18	1 1/4"	0.188	0.0188	0.118	0.400	0.234	0.129	1.409	0.021	0.421	0.215	0.090	1.780	166	2.075	0.014	0.053	-0.807	1.677	0.768
358DWS22	362S125-27	1 1/4"	0.188	0.0283	0.176	0.600	0.347	0.192	1.404	0.031	0.416	0.338	0.154	3.050	568	1.957	0.047	0.077	-0.797	1.667	0.771
358DWS20	362S125-30	1 1/4"	0.188	0.0312	0.194	0.660	0.381	0.210	1.402	0.033	0.415	0.375	0.175	3.460	761	1.935	0.063	0.084	-0.794	1.664	0.772
358T25	362T125-18	1 1/4"	none	0.0188	0.115	0.390	0.240	0.127	1.442	0.017	0.380	0.192	0.066	1.300	161	2.366	0.014	0.042	-0.675	1.637	0.830
358T22	362T125-27	1 1/4"	none	0.0283	0.173	0.590	0.358	0.191	1.438	0.025	0.378	0.301	0.135	2.660	546	2.109	0.046	0.062	-0.670	1.631	0.831
358T20	362T125-30	1 1/4"	none	0.0312	0.191	0.650	0.395	0.210	1.438	0.027	0.378	0.339	0.152	3.010	731	2.095	0.062	0.068	-0.669	1.630	0.832
4" Members																					
4DWS25[8]	400S125-18	1 1/4"	0.188	0.0188	0.125	0.420	0.294	0.147	1.536	0.021	0.414	0.265	0.099	1.960	150	2.325	0.015	0.066	-0.774	1.769	0.809
4DWS22	400S125-27	1 1/4"	0.188	0.0283	0.187	0.640	0.438	0.219	1.531	0.031	0.410	0.426	0.178	3.520	511	2.150	0.050	0.096	-0.764	1.759	0.811
4DWS20	400S125-30	1 1/4"	0.188	0.0312	0.206	0.700	0.481	0.240	1.529	0.034	0.408	0.473	0.202	3.990	686	2.127	0.067	0.105	-0.761	1.756	0.812
4T25[8]	400T125-18	1 1/4"	none	0.0188	0.122	0.420	0.300	0.145	1.566	0.017	0.373	0.243	0.072	1.430	146	2.634	0.014	0.052	-0.647	1.735	0.861
4T22	400T125-27	1 1/4"	none	0.0283	0.184	0.630	0.449	0.217	1.562	0.025	0.372	0.380	0.156	3.080	494	2.306	0.049	0.077	-0.641	1.729	0.862
4T20	400T125-30	1 1/4"	none	0.0312	0.203	0.690	0.495	0.239	1.562	0.028	0.371	0.427	0.176	3.490	661	2.289	0.066	0.085	-0.640	1.729	0.863
6" Members																					
6DWS25[8]	600S125-18	1 1/4"	0.188	0.0188	0.162	0.550	0.778	0.259	2.189	0.024	0.382	-	-	-	-	-	0.019	0.169	-0.637	2.312	0.924
6DWS22[8]	600S125-27	1 1/4"	0.188	0.0283	0.243	0.830	1.160	0.387	2.183	0.035	0.377	1.145	0.274	5.420	335	3.413	0.065	0.247	-0.628	2.303	0.926
6DWS20	600S125-30	1 1/4"	0.188	0.0312	0.268	0.910	1.275	0.425	2.181	0.038	0.376	1.259	0.331	6.540	448	3.292	0.087	0.270	-0.625	2.300	0.926
6T25	600T125-18	1 1/4"	none	0.0188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6T22[8]	600T125-27	1 1/4"	none	0.0283	0.241	0.820	1.168	0.381	2.204	0.028	0.340	1.041	0.225	4.440	327	3.693	0.064	0.195	-0.525	2.291	0.948
6T20	600T125-30	1 1/4"	none	0.0312	0.265	0.900	1.288	0.419	2.204	0.031	0.340	1.159	0.272	5.370	438	3.573	0.086	0.214	-0.524	2.291	0.948
Deep Leg Tracks																					
212DT20	212T200-30	2"	none	0.0312	0.202	0.688	0.252	0.191	1.116	0.088	0.659	0.178	0.098	1.941	851	1.657	0.066	0.106	-1.439	1.936	0.448
358DT20	362T200-30	2"	none	0.0312	0.237	0.808	0.556	0.296	1.531	0.099	0.645	0.408	0.167	3.304	739	2.279	0.077	0.242	-1.288	2.102	0.625
4DT20	400T200-30	2"	none	0.0312	0.249	0.847	0.690	0.333	1.665	0.102	0.640	0.514	0.187	3.685	667	2.516	0.081	0.303	-1.245	2.175	0.672
6DT20	600T200-30	2"	none	0.0312	0.311	1.060	1.720	0.560	2.350	0.114	0.605	1.373	0.277	5.474	441	3.907	0.101	0.762	-1.061	2.649	0.839

MARINO WARE
QUALITY AND SERVICE COUNT.

LIMITING HEIGHTS, FT. - IN.

APPLICATION:

For selection of non-load bearing interior wall framing subjected to uniform loads.

USE:

Select a stud, in terms of spacing (inches on center) lateral load (PSF), and deflection limit which provides an allowable height, in feet, equal to or greater than the actual project requirements.

NOTES FOR COMPOSITE:

1. Limiting heights are based on the stud with the contribution due to the attachment of the gypsum wallboard.
2. Composite wall sheathed both sides full height with ½" gypsum wallboard for 18 and 30 mil.
3. The use of these tables are limited to applications involving simply supported conditions (i.e. laterally supported at each end). Applications involving the installation of handrails, brackets, etc. require further analysis.
4. Check end reactions for web crippling. Where the web height to thickness ratio of the stud exceeds 200 bearing stiffeners are required at support locations.

NOTES FOR NON-COMPOSITE:

1. Limiting heights are based on the stud alone without contribution due to the attachment of the gypsum wallboard.
2. Limiting heights based on continuous support of each flange over the full length of the stud by the proper attachment of gypsum wallboards or other sheathing products of equivalent or greater strength applied full height to each side of the wall. Mechanical bridging, spaced at vertical intervals not to exceed 5'-0" on center, may be substituted in conditions where sheathing is not installed full height each side or to one side only. Reductions in allowable bending capacities must be investigated separately.
3. The use of these tables are limited to applications involving simply supported conditions (i.e. laterally supported at each end). Applications involving the installation of handrails, brackets, etc. require further analysis.
4. Heights indicated are based on steel stud properties only.
5. Check end reactions for web crippling. Where the web height to thickness ratio of the stud exceeds 200 bearing stiffeners are required at support locations.

Limiting Heights Tables (Composite)

Member		Wind Load and Spacing								
M\W Type (SSMA)	Deflection	5 PSF			7.5 PSF			10 PSF		
		12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.
1-5/8" Members										
158DWS25 (162S125-18)	L/120	11'-2"	10'-7"	9'-9" f	9'-9"	8'-10" f	8'-0" f	8'-10"	8'-4"	**
	L/240	8'-10"	8'-4"	7'-11"	**	**	**	**	**	**
	L/360	**	**	**	**	**	**	**	**	**
158DWS22 (162S125-27)	L/120									
	L/240	-	-	-	-	-	-	-	-	-
	L/360	-	-	-	-	-	-	-	-	-
158DWS20 (162S125-30)	L/120	12'-5"	11'-6"	10'-5"	10'-10"	10'-1"	9'-2"	9'-11"	9'-2"	8'-3"
	L/240	9'-11"	9'-2"	8'-3"	**	**	**	**	**	**
	L/360	**	**	**	**	**	**	**	**	**
2-1/2" Members										
212DWS25 (250S125-18)	L/120	15'-1"	13'-3" f	11'-10" f	12'-4" f	10'-10" f	9'-8" f	10'-9" f	9'-5" f	8'-5" f
	L/240	11'-11"	11'-3"	10'-7"	10'-5"	9'-10"	9'-3"	9'-6"	8'-11	8'-5"
	L/360	10'-5"	9'-10"	9'-3"	9'-1"	8'-7"	8'-1"	**	**	**
212DWS22 (250S125-27)	L/120	-	-	-	-	-	-	-	-	-
	L/240	-	-	-	-	-	-	-	-	-
	L/360	-	-	-	-	-	-	-	-	-
212DWS20 (250S125-30)	L/120	16'-8"	15'-4"	13'-9"	14'-7"	13'-4"	11'-11"	13'-2"	12'-1"	10'-9"
	L/240	13'-2"	12'-1"	10'-9"	11'-6"	10'-6"	9'-4"	10'-5"	9'-6"	8'-6"
	L/360	11'-6"	10'-6"	9'-4"	10'-0"	9'-2"	8'-1"	9'-1"	8'-4"	7'-4"

Limiting Heights Tables (Non-Composite)

Member		Wind Load and Spacing								
M\W Type (SSMA)	Deflection	5 PSF			7.5 PSF			10 PSF		
		12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.
1-5/8" Members										
158DWS25 (162S125-18)	L/120	9'-7"	8'-8"	7'-7"	8'-4"	7'-7"	6'-2" f	7'-7"	6'-7" f	5'-4" f
	L/240	7'-7"	6'-11"	6'-0"	6'-7"	6'-0"	5'-3"	6'-0"	5'-5"	4'-9"
	L/360	6'-7"	6'-0"	5'-3"	5'-9"	5'-3"	4'-7"	5'-3"	4'-9"	4'-2"
158DWS22 (162S125-27)	L/120	11'-3"	10'-3"	8'-11"	9'-10"	8'-11"	7'-9" f	8'-11"	8'-1"	6'-8" f
	L/240	8'-11"	8'-1"	7'-1"	7'-9"	7'-1"	6'-2"	7'-1"	6'-5"	5'-7"
	L/360	7'-9"	7'-1"	6'-2"	6'-10"	6'-2"	5'-5"	6'-2"	5'-7"	4'-11"
158DWS20 (162S125-30)	L/120	11'-7"	10'-6"	9'-2"	10'-1"	9'-2"	8'-0"	9'-2"	8'-4"	7'-2" f
	L/240	9'-2"	8'-4"	7'-3"	8'-0"	7'-3"	6'-4"	7'-3"	6'-7"	5'-9"
	L/360	8'-0"	7'-3"	6'-4"	7'-0"	6'-4"	5'-7"	6'-4"	5'-9"	5'-0"
2-1/2" Members										
212DWS25 (250S125-18)	L/120	13'-3"	12'-0"	10'-2" f	11'-7"	10'-2" f	8'-4" f	10'-2" f	8'-10" f	7'-2" f
	L/240	10'-6"	9'-6"	8'-4"	9'-2"	8'-4"	7'-3"	8'-4"	7'-7"	6'-7"
	L/360	9'-2"	8'-4"	7'-3"	8'-0"	7'-3"	6'-4"	7'-3"	6'-7"	5'-9"
212DWS22 (250S125-27)	L/120	15'-6"	14'-1"	12'-4"	13'-7"	12'-4"	10'-4" f	12'-4"	10'-11" f	8'-11" f
	L/240	12'-4"	11'-2"	9'-9"	10'-9"	9'-9"	8'-6"	9'-9"	8'-10"	7'-9"
	L/360	10'-9"	9'-9"	8'-6"	9'-5"	8'-6"	7'-5"	8'-6"	7'-9"	6'-9"
212DWS20 (250S125-30)	L/120	16'-1"	14'-7"	12'-9"	14'-0"	12'-9"	11'-0" f	12'-9"	11'-7"	9'-6" f
	L/240	12'-9"	11'-7"	10'-1"	11'-1"	10'-1"	8'-10"	10'-1"	9'-2"	8'-0"
	L/360	11'-1"	10'-1"	8'-10"	9'-8"	8'-10"	7'-8"	8'-10"	8'-0"	7'-0"

NOTES:

1. [f] Flexural stress controls allowable wall height.
2. [-] No composite values are available for 27 mil material.
3. [*] No limiting heights are available for this product per AISI.
4. [**] No data available for these applications.

MARINO WARE
QUALITY AND SERVICE COUNT.

LIMITING HEIGHTS, FT. - IN.

Limiting Heights Tables (Composite)

Member		Wind Load and Spacing								
M\W Type (SSMA)	Deflection	5 PSF			7.5 PSF			10 PSF		
		12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.
3-5/8" Members										
358DWS25 (362S125-18)	L/120	17'-8" f	15'-4" f	13'-9" f	14'-3" f	12'-5" f	11'-0" f	12'-5" f	10'-9" f	9'-5" f
	L/240	15'-4"	14'-4"	13'-5"	13'-3"	12'-5"	11'-0" f	12'-0"	10'-9" f	9'-5" f
	L/360	13'-3"	12'-4"	11'-7"	11'-7"	10'-10"	10'-1"	10'-5"	9'-9"	9'-1"
358DWS22 (362S125-27)	L/120	-	-	-	-	-	-	-	-	-
	L/240	-	-	-	-	-	-	-	-	-
	L/360	-	-	-	-	-	-	-	-	-
358DWS20 (362S125-30)	L/120	21'-8"	19'-11"	17'-9"	18'-11"	17'-5"	15'-6"	17'-1"	15'-8"	14'-0"
	L/240	17'-1"	15'-8"	14'-0"	14'-10"	13'-7"	12'-0"	13'-5"	12'-3"	10'-10"
	L/360	14'-10"	13'-7"	12'-0"	12'-10"	11'-9"	10'-5"	11'-8"	10'-7"	9'-4"
4" Members										
4DWS25 (400S125-18)	L/120	19'-6" f	17'-2" f	15'-1" f	15'-9" f	13'-10" f	12'-1" f	13'-8" f	11'-11" f	10'-5" f
	L/240	16'-5"	15'-4"	14'-2"	14'-4"	13'-4"	12'-1" f	13'-0"	11'-11" f	10'-5" f
	L/360	14'-4"	13'-4"	12'-4"	12'-6"	11'-8"	10'-9"	11'-4"	10'-6"	9'-9"
4DWS22 (400S125-27)	L/120	-	-	-	-	-	-	-	-	-
	L/240	-	-	-	-	-	-	-	-	-
	L/360	-	-	-	-	-	-	-	-	-
4DWS20 (400S125-30)	L/120	24'-0"	22'-0"	19'-8"	20'-11"	19'-3"	17'-1" f	19'-0"	17'-6"	14'-9" f
	L/240	19'-0"	17'-6"	15'-7"	16'-6"	15'-2"	13'-5"	14'-11"	13'-8"	12'-1"
	L/360	16'-6"	15'-2"	13'-5"	14'-4"	13'-1"	11'-7"	12'-11"	11'-10"	10'-5"
6" Members										
6DWS25 (600S125-18)	L/120	22'-10"	19'-9" f	16'-9" f	18'-7" f	16'-2" f	13'-5" f	16'-2" f	14'-0" f	11'-5" f
	L/240	22'-1"	19'-9" f	16'-9" f	18'-7" f	16'-2" f	13'-5" f	16'-2" f	14'-0" f	11'-5" f
	L/360	19'-4"	17'-11"	16'-9" f	16'-9"	15'-7"	13'-5" f	15'-0"	13'-10"	11'-5" f
6DWS22 (600S125-27)	L/120	-	-	-	-	-	-	-	-	-
	L/240	-	-	-	-	-	-	-	-	-
	L/360	-	-	-	-	-	-	-	-	-
6DWS20 (600S125-30)	L/120	32'-1"	29'-2"	25'-1" f	28'-0"	24'-9" f	20'-6" f	24'-7" f	21'-5" f	17'-9" f
	L/240	25'-6"	23'-2"	20'-3"	22'-3"	20'-3"	17'-8"	20'-3"	18'-4"	16'-0"
	L/360	22'-3"	20'-3"	17'-8"	19'-5"	17'-8"	15'-5"	17'-6"	15'-10"	13'-8"

Limiting Heights Tables (Non-Composite)

Member		Wind Load and Spacing								
M\W Type (SSMA)	Deflection	5 PSF			7.5 PSF			10 PSF		
		12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.	12"o.c.	16"o.c.	24"o.c.
3-5/8" Members										
358DWS25 (362S125-18)	L/120	17'-3"	15'-1" f	12'-4" f	14'-3" f	12'-4" f	10'-1" f	12'-4" f	10'-8" f	8'-9" f
	L/240	13'-8"	12'-5"	10'-10"	11'-11"	10'-10"	9'-6"	10'-10"	9'-10"	8'-7"
	L/360	11'-11"	10'-10"	9'-6"	10'-5"	9'-6"	8'-3"	9'-6"	8'-7"	7'-6"
358DWS22 (362S125-27)	L/120	20'-1"	18'-3"	15'-11"	17'-7"	15'-11"	13'-1" f	15'-11"	13'-10 f	11'-4" f
	L/240	15'-11"	14'-6"	12'-8"	13'-11"	12'-8"	11'-0"	12'-8"	11'-6"	10'-0"
	L/360	13'-11"	12'-8"	11'-0"	12'-2"	11'-0"	9'-8"	11'-0"	10'-0"	8'-9"
358DWS20 (362S125-30)	L/120	20'-10"	18'-11"	16'-6"	18'-2"	16'-6"	13'-11" f	16'-6"	14'-9" f	12'-1" f
	L/240	16'-6"	15'-0"	13'-1"	14'-5"	13'-1"	11'-5"	13'-1"	11'-11"	10'-5"
	L/360	14'-5"	13'-1"	11'-5"	12'-7"	11'-5"	10'-0"	11'-5"	10'-5"	9'-1"
4" Members										
4DWS25 (400S125-18)	L/120	18'-8" f	16'-2" f	13'-2" f	15'-2" f	13'-2" f	10'-9" f	13'-2" f	11'-5" f	9'-4" f
	L/240	15'-1"	13'-9"	12'-0"	13'-2"	12'-0"	10'-6"	12'-0"	10'-11"	9'-4" f
	L/360	13'-2"	12'-0"	10'-6"	11'-6"	10'-6"	9'-2"	10'-6"	9'-6"	8'-4"
4DWS22 (400S125-27)	L/120	22'-4"	20'-3"	17'-8" f	19'-6"	17'-8" f	14'-5" f	17'-8" f	15'-3" f	12'-6" f
	L/240	17'-8"	16'-1"	14'-0"	15'-5"	14'-0"	12'-3"	14'-0"	12'-9"	11'-2"
	L/360	15'-5"	14'-0"	12'-3"	13'-6"	12'-3"	10'-8"	12'-3"	11'-2"	9'-9"
4DWS20 (400S125-30)	L/120	23'-1"	21'-0"	18'-4"	20'-2"	18'-4"	15'-4" f	18'-4"	16'-3" f	13'-3" f
	L/240	18'-4"	16'-8"	14'-7"	16'-0"	14'-7"	12'-8"	14'-7"	13'-3"	11'-6"
	L/360	16'-0"	14'-7"	12'-8"	14'-0"	12'-8"	11'-1"	12'-8"	11'-6"	10'-1"
6" Members										
6DWS25 (600S125-18)	L/120	*	*	*	*	*	*	*	*	*
	L/240	*	*	*	*	*	*	*	*	*
	L/360	*	*	*	*	*	*	*	*	*
6DWS22 (600S125-27)	L/120	31'-0" f	26'-10" f	21'-11" f	25'-4" f	21'-11" f	17'-11" f	21'-11" f	19'-0" f	15'-6" f
	L/240	24'-8"	22'-4"	19'-6"	21'-6"	19'-6"	17'-1"	19'-6"	17'-9"	15'-6" f
	L/360	21'-6"	19'-6"	17'-1"	18'-9"	17'-1"	14'-11"	17'-1"	15'-6"	13'-6"
6DWS20 (600S125-30)	L/120	32'-0"	29'-1"	24'-1" f	27'-10" f	24'-1" f	19'-8" f	24'-1" f	20'-10" f	17'-0" f
	L/240	25'-5"	23'-1"	20'-2"	22'-2"	20'-2"	17'-7"	20'-2"	18'-4"	16'-0"
	L/360	22'-2"	20'-2"	17'-7"	19'-5"	17'-7"	15'-5"	17'-7"	16'-0"	14'-0"

NOTES:

1. [f] Flexural stress controls allowable wall height.
2. [-] No composite values are available for 27 mil material.
3. [*] No limiting heights are available for this product per AISI.
4. [**] No data available for these applications.

MARINO WARE
QUALITY AND SERVICE COUNT.

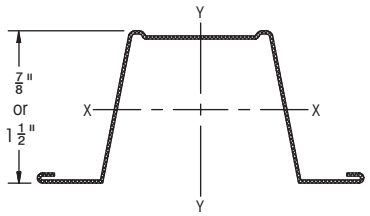
FURRING CHANNEL

Furring Channel - Physical Properties & Span Tables

7/8" Furring Channel Physical Properties

M\W Type	SSMA	Min. Bare Metal Thickness[1] (in)	Design Thickness (in)	Gross Area (in^2)	Effective Properties[3,4] Ixx^2 (in^4)	Ma (ft-lb)
7/8DWF25	087F125-18	0.0179	0.0188	0.070	0.008	26.4
7/8DWF20	087F125-30	0.0296	0.0312	0.118	0.014	50.3
7/8DWF18	087F125-43	0.0428	0.0451	0.163	0.019	70.1

1. Minimum bare metal thickness is 95% of design thickness.
2. Moment of inertia given is for deflection calculations.
3. Effective properties are given as the minimum value for either positive or negative bending.
4. Effective properties based on Fy = 33ksi.



1-1/2" Furring Channel Physical Properties

M\W Type	SSMA	Min. Bare Metal Thickness[1] (in)	Design Thickness (in)	Gross Area (in^2)	Effective Properties[3,4] Ixx^2 (in^4)	Ma (ft-lb)
112DWF25	150F125-18	0.0179	0.0188	0.093	0.029	56.4
112DWF20	150F125-30	0.0296	0.0312	0.154	0.050	104.9
112DWF18	150F125-43	0.0428	0.0451	0.220	0.070	147.5

1. Minimum bare metal thickness is 95% of design thickness.
2. Moment of inertia given is for deflection calculations.
3. Effective properties are given as the minimum value for either positive or negative bending.
4. Effective properties based on Fy = 33ksi.

Allowable Ceiling Spans L/240

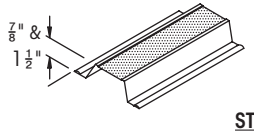
M\W Type	SSMA	Spans	Applied Load 4 psf Hat Spacing (in) o.c. 12	16	24	6 psf 12	16	24	13 psf 12	16	24
7/8DWF25	087F125-18	Single	5'-2"	4'-8"	4'-1"	4'-6"	4'-1"	3'-7"	3'-6"	3'-2"	2'-9"
		Multiple	6'-5"	5'-10"	5'-1"	5'-7"	5'-1"	4'-2"	4'-0"	3'-5"	2'-10"
7/8DWF20	087F125-30	Single	6'-2"	5'-7"	4'-10"	5'-4"	4'-10"	4'-3"	4'-2"	3'-9"	3'-3"
		Multiple	7'-7"	6'-11"	6'-0"	6'-8"	6'-0"	5'-3"	5'-1"	4'-8"	3'-11"
7/8DWF18	087F125-43	Single	6'-10"	6'-2"	5'-5"	6'-0"	5'-5"	4'-9"	4'-7"	4'-2"	3'-8"
		Multiple	8'-5"	7'-8"	6'-8"	7'-5"	6'-8"	5'-10"	5'-8"	5'-2"	4'-6"
112DWF25	150F125-18	Single	7'-10"	7'-1"	6'-3"	6'-10"	6'-3"	5'-5"	5'-3"	4'-9"	3'-11"
		Multiple	9'-8"	8'-10"	7'-6"	8'-6"	7'-6"	6'-1"	5'-10"	5'-1"	3'-11"
112DWF20	150F125-30	Single	9'-4"	8'-6"	7'-5"	8'-2"	7'-5"	6'-5"	6'-3"	5'-8"	5'-0"
		Multiple	11'-6"	10'-6"	9'-2"	10'-1"	9'-2"	8'-0"	7'-9"	6'-11"	5'-8"
112DWF18	150F125-43	Single	10'-5"	9'-6"	8'-3"	9'-2"	8'-3"	7'-3"	7'-1"	6'-5"	5'-7"
		Multiple	12'-11"	11'-9"	10'-3"	11'-3"	10'-3"	8'-11"	8'-9"	7'-11"	6'-8"

Fy = 33ksi
Allowable ceiling spans based on effective properties.
Multiple span indicates two or more equal spans with channel continuous over center support.
Bearing length = 0.75".

Allowable Ceiling Spans L/360

M\W Type	SSMA	Spans	Applied Load 4 psf Hat Spacing (in) o.c. 12	16	24	6 psf 12	16	24	13 psf 12	16	24
7/8DWF25	087F125-18	Single	4'-6"	4'-1"	3'-7"	3'-11"	3'-7"	3'-1"	3'-0"	2'-9"	2'-5"
		Multiple	5'-7"	5'-1"	4'-5"	4'-11"	4'-5"	3'-10"	3'-9"	3'-5"	2'-10"
7/8DWF20	087F125-30	Single	5'-4"	4'-10"	4'-3"	4'-8"	4'-3"	3'-8"	3'-7"	3'-3"	2'-10"
		Multiple	6'-8"	6'-0"	5'-3"	5'-9"	5'-3"	4'-7"	4'-6"	4'-1"	3'-6"
7/8DWF18	087F125-43	Single	6'-0"	5'-5"	4'-9"	5'-2"	4'-9"	4'-1"	4'-0"	3'-8"	3'-2"
		Multiple	7'-5"	6'-8"	5'-10"	6'-5"	5'-10"	5'-1"	5'-0"	4'-6"	3'-11"
112DWF25	150F125-18	Single	6'-10"	6'-3"	5'-5"	6'-0"	5'-5"	4'-9"	4'-7"	4'-2"	3'-8"
		Multiple	8'-6"	7'-8"	6'-9"	7'-5"	6'-9"	5'-10"	5'-8"	5'-1"	3'-11"
112DWF20	150F125-30	Single	8'-2"	7'-5"	6'-5"	7'-1"	6'-5"	5'-8"	5'-6"	5'-0"	4'-4"
		Multiple	10'-1"	9'-2"	8'-0"	8'-10"	8'-0"	7'-0"	6'-9"	6'-2"	5'-5"
112DWF18	150F125-43	Single	9'-2"	8'-3"	7'-3"	8'-0"	7'-3"	6'-4"	6'-2"	5'-7"	4'-10"
		Multiple	11'-3"	10'-3"	8'-11"	9'-10"	8'-11"	7'-10"	7'-7"	6'-11"	6'-0"

Fy = 33ksi
Allowable ceiling spans based on effective properties.
Multiple span indicates two or more equal spans with channel continuous over center support.
Bearing length = 0.75".



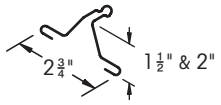
USE:
- As furring over masonry walls and hot rolled steel shapes. Cross furring for gypsum wallboard and plaster soffits and ceilings.

AVAILABLE GAUGES:
- 25, 20 & 18

NOMENCLATURE EXAMPLE:
- 78 DWF 25

STOCK LENGTHS & PACKAGING:
- 25 Gauge Furring 10 & 12 Ft. **900 Pieces Per Skid**
- 20 Gauge Furring 10 & 12 Ft. **450 Pieces Per Skid**
- 18 Gauge Furring 10 & 12 Ft. **225 Pieces Per Skid**
- Other Lengths available upon request.

7/8" or 1 1/2" FURRING CHANNEL

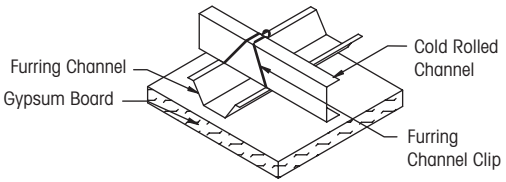


USE:
- Provides economical method of attaching 7/8" Drywall Furring Channels to 1 1/2" and 2" Cold Rolled Channel.

NOTE:
- Alternate direction of every other clip along cold rolled channel.

PACKAGING:
- 500 Pieces per box.

FURRING CHANNEL CLIPS



FURRING CHANNEL CLIP ASSEMBLY

MARINO WARE
QUALITY AND SERVICE COUNT.

RESILIENT CHANNELS

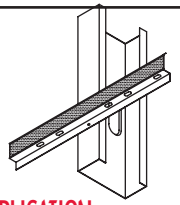
USE:

- As furring over wood or steel framed walls and ceilings.
- Reduced contact with supporting members offers economical means for reducing sound transmission.

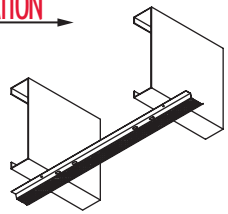
Note: *STC ratings are not available for RC-2. No test data is available for this product.*

RESILIENT CHANNEL (RC-1)

RESILIENT CHANNEL (RC-2)



RC-1 WALL APPLICATION



RC-1 CEILING APPLICATION

Resilient Channel Installation - Walls

Attach RC-1 Resilient Channels with the attachment flange down and at right angles to the studs. Position bottom channel with attachment flange up for ease of attachment. Fasten resilient channels to steel studs with ⅜" Type S pan head screws, to wood studs with 1¼" Type W screws. Locate RC-1 2" max up from the floor and within 6" of the ceiling and at no more than 24" on center intervals (16" on center max for some veneer plaster assemblies). Extend RC channels into all corners and attach to corner framing. Splice channels directly over studs by nesting (not butting) the channels and driving fasteners through both flanges into support.

Resilient Channel Installation - Ceilings

Attach RC-1 Resilient Channels at right angles to the joists. Fasten the resilient channels to the joists with proper screw fasteners as stated above. Install resilient channels 24" on center max. when joist spacing is 16" on center and 16" on center max. when joist spacing is 24" on center. One or two layers of gypsum board may be used.

MARINO WARE
QUALITY AND SERVICE COUNT.

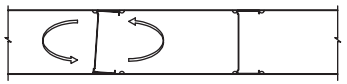
WAREWALL® SNAP-IN DRYWALL FRAMING SYSTEM

The **Warewall**® Snap-In Drywall Framing System is an innovative method for constructing interior gypsum drywall partitions. It consists of interlocking steel stud and track sections which are easy to install and offer many advantages over old-fashioned wood and conventional metal framed assemblies.

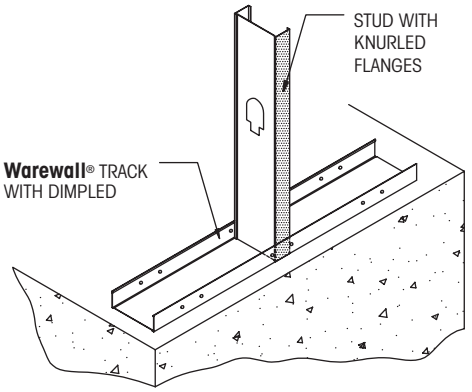
Warewall® reduces wall installation time. Our unique dimpled track system pre-determines the stud spacing thus eliminating time consuming measuring. Dimples are located 8" on center to accommodate both 16" and 24" on center stud spacing. Simply align the dimples of the top and bottom track, insert the stud in the track, and twist in place. Typical track to stud screw attachments are eliminated! Warewall keeps the studs positioned to ease drywall alignment and attachments.

Available in 1⅝", 2½" & 3⅝" depths and 25 & 20 gauge.

- **Warewall**® is an ecologically appealing alternative to wood framing. Steel is the most recycled material.
- **Warewall**® is non-combustible. Steel does not contribute "fuel" to a fire.
- **Warewall**® is lightweight and easy to handle.
- **Warewall**® is insect and vermin proof.
- **Warewall**® is resistant to rot and warp. Gypsum wallboard is screw attached to the studs thus eliminating unsightly "nail pops" which are often the result of the drying and shrinking of wood framing.
- Studs have knurled flanges to prevent slipping of the drywall screws during installation.
- Studs are pre-punched with service holes to ease installation of wiring, plumbing, etc.
- Steel framing components are consistently straight and free of twisting, knots and splits often found in wood framing.



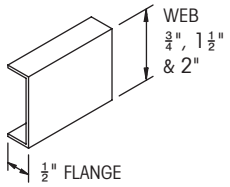
INSERT STUD IN WAREWALL® TRACKS & TWIST IN PLACE....NO SCREWS REQUIRED



MARINO\WARE
QUALITY AND SERVICE COUNT.

SYSTEM ACCESSORIES

COLD ROLLED CHANNEL



USE:
- Mechanical bridging for studs.
- Applications involving metal lath and plaster.

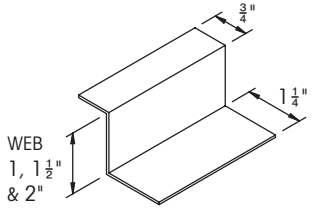
AVAILABLE DEPTHS:
- ¾" , 1½" & 2"

AVAILABLE GAUGES:
- 16 gauge

NOMENCLATURE EXAMPLE:
- 112 CR 16
  (1½") (gauge)

STOCK LENGTHS & PACKAGING:
- 500 pieces per skid
- 10 & 16 Ft.
- Other lengths available upon request.

Z-FURRING CHANNEL



USE:
- For attachment of rigid insulation and wallboard to masonry walls.

AVAILABLE DEPTHS:
- 1" (1), 1½" (112) & 2" (2)

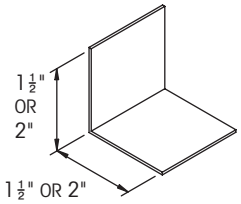
AVAILABLE GAUGES:
- 25, 20, 18, 16, 14 & 12 gauge

CUSTOM SIZES AVAILABLE UPON REQUEST

NOMENCLATURE EXAMPLE:
- 112 ZF 25
  (1½") (gauge)

STOCK LENGTHS & PACKAGING:
- 1,000 pieces per skid
- 10 Ft.
- Other lengths available upon request.

UTILITY ANGLE



USE:
- For miscellaneous attachments of intersecting framing components.
- For right angle corner enclosures at lapped framing conditions.

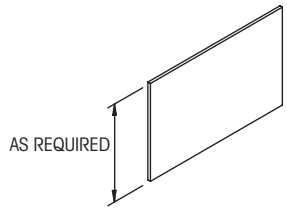
AVAILABLE SIZES AND GAUGES:
- 1½" x 1½" (25 gauge or 20 gage)
- 2" x 2" (25 gauge or 20 gauge)

CUSTOM SIZES AVAILABLE UPON REQUEST

NOMENCLATURE EXAMPLE:
- 112 x 112 AN 25
  (1½" x 1½") (gauge)

STOCK LENGTHS & PACKAGING:
- 1,000 pieces per skid
- 10 Ft.
- Other lengths available upon request.

FLAT STRAPS



USE:
- Tension component.
- Backing plates for wall mounted fixtures, railings, etc.
- Stud bridging

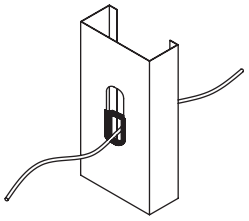
AVAILABLE GAUGES:
- 25, 22, 20, 18, 16, 14 & 12 gauge

AVAILABLE WIDTHS AND LENGTHS:
- 10 Ft. - Standard·
- Sizes other than 10 ft. by special order.
- Product furnished decoiled.

NOMENCLATURE EXAMPLE:
- 4 FS 22
  (Width) (gauge)

STOCK LENGTHS & PACKAGING:
- 4" - 20 gauge - 500 pieces per skid
- 6" - 20 gauge - 500 pieces per skid

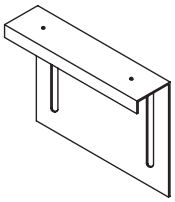
GROMMET



USE:
- Designed to fit into knockout of studs.
- Easy snap-in fit – no tools required.
- Protects wiring from edge of knockout

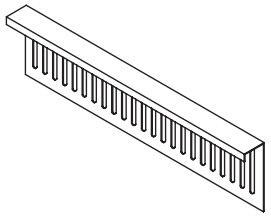
PACKAGING:
- 50 pieces per bag
- 1000 bags per carton

WSC-DEFLEX CLIP



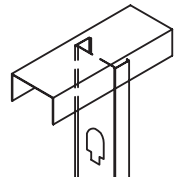
USE:
- This innovative deflection clip compliments Marino\WARE's line of patented proprietary deflection and slide clips.
- The "Deflex" clips allow for up to 1½" vertical floor or roof deflection without the use of laborious slip tracks.
- Offered in two convenient sizes for 3⅝" (3T1000) and 6" (6T1000) studs.
- It has pre-drilled holes for attachment ease.
- The "Deflex" clip has been tested and certified to support a lateral load of 1,000 lbs.

WSC-OUTRIGGER



USE:
- The WSC-Outrigger offers a 1,500 lbs. capacity.
- The WSC-Outrigger offers the highest tested capacity of any horizontal surface connection clip.
- The WSC-Outrigger is used for horizontal surface applications.
- The WSC-Outrigger can be cut to accommodate other conditions.

DEFLECTION TRACK



USE:
- Permits building movement at the top of the stud wall.

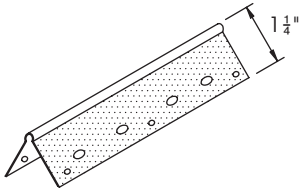
AVAILABLE GAUGES:
- 25, 20, 18, 16, 14 & 12 gauge

AVAILABLE SIZES:
- 10 ft. - Standard
- Custom widths and leg heights and lengths available.

SPECIAL INSTRUCTIONS:
- Dimensioned product drawing must accompany order.

SYSTEM ACCESSORIES

1 1/4" CORNER BEAD



USE:

- Reinforcement for outside corners of gypsum wallboard partitions.

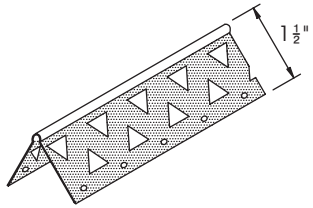
STOCK LENGTHS & PACKAGING:

- 6 Ft. 10 in — 75 pieces per carton
- 8 Ft. — 63 pieces per carton
- 9 Ft. — 56 pieces per carton
- 10 Ft. — 50 pieces per carton
- 12 Ft. — 42 pieces per carton

NOTE:

- Available in shiny or dull finish.

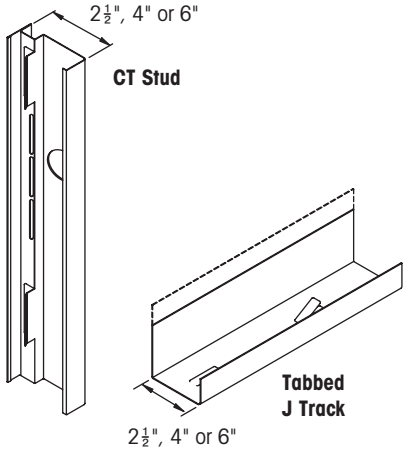
K-RITE CORNER BEAD



USE:

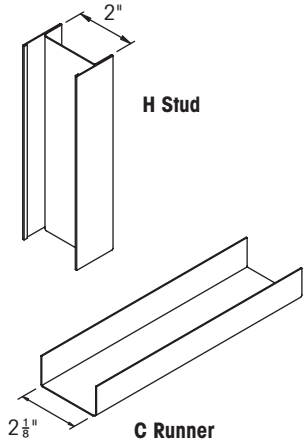
- K-Rite corner bead is compatible with all brands of one and two coat plaster systems or multi-layer drywall construction.
- Perfect choice for repairs, column construction and new construction.

SHAFTWALL METAL PRODUCTS

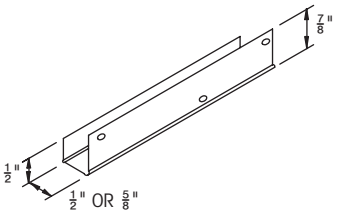


Please refer to our Shaftwall Catalog for more information on these products.

AREA SEPARATION WALL



1/2" & 5/8" U TRIM



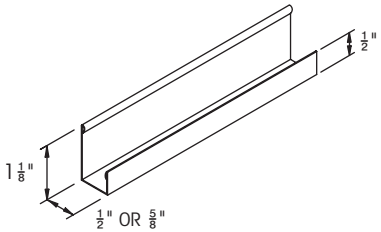
USE:

- Channel type trim that provides a protective edge for wallboard where wall openings or where the board terminates to other surfaces.
- The nailing flange is knurled to improve adherence of coatings.

STOCK LENGTHS & PACKAGING:

- 10 Ft. — 50 pieces per carton

1/2" & 5/8" J TRIM



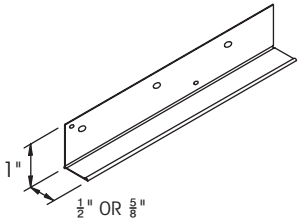
USE:

- Channel type trim that provides a protective edge for wallboard where finish spackling is not required.

STOCK LENGTHS & PACKAGING:

- 10 Ft. — 50 pieces per carton

1/2" & 5/8" L TRIM



USE:

- Angle type drywall trim used as a finished edge after the wallboard has been attached.

STOCK LENGTHS & PACKAGING:

- 10 Ft. — 50 pieces per carton

TIE WIRE

USE:

- Tie wire is used to support suspended cold rolled channel gridwork for stucco, plaster, acoustical or drywall ceilings.
- It is available in different gauges.

MARINO WARE
QUALITY AND SERVICE COUNT.

DRYWALL FINISHING PRODUCTS

PREMIUM VINYLS

These vinyl products are produced efficiently by computer controlled, state of the art, high speed machinery to provide top quality materials and money-saving prices. All of our vinyl products are extruded to exacting specifications and specially treated for maximum mud adhesion.

CORNER BEAD

Provides rigid protection for the exposed edges of a wall; which can be nailed or staple applied. Flanges are perforated for positive joint compound bond.

Lgth	Pcs/Ctn	Ft/Ctn
8'	50	400
10'	50	500

ARCHWAY CORNER BEAD

A high quality trim board that can be used in a variety of radius applications.

Lgth	Pcs/Ctn	Ft/Ctn
10'	50	500

SPLAY BEAD

This splay bead adjusts easily to a variety of angles.

Lgth	Pcs/Ctn	Ft/Ctn
8'	50	400
10'	50	500

¾" BULLNOSE CORNER BEAD

Used in applications with high traffic or subject to high abuse. Gives corners a smooth rounded edge.

Lgth	Pcs/Ctn	Ft/Ctn
8'	35	280
10'	35	350

¾" BULLNOSE ARCHWAY

Flexes beautifully to archways. This bead finishes arched and other curves perfectly.

Lgth	Pcs/Ctn	Ft/Ctn
8'	35	280
10'	35	350

¾" BULLNOSE SPLAY BEAD

Adjusts easily to a variety of angles making it a very versatile product.

Lgth	Pcs/Ctn	Ft/Ctn
8'	35	280
10'	35	350

¾" BULLNOSE INSIDE BEAD

Similar to our Bullnose Splay for inside corners.

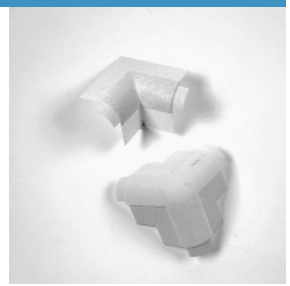
Lgth	Pcs/Ctn	Ft/Ctn
10'	35	350

2 & 3 WAY BULLNOSE CORNERS

2-Way: For a professional finish where two bullnose corners meet @ 90°.

3-Way: For a professional finish where three bullnose corners meet @ 90°.

Each Corner is packaged in 50 Pcs/Box



DRYWALL FINISHING PRODUCTS

PERFORMANCE

These vinyl products will perform to the standards you demand. Our consistent quality will achieve equal or better results when compared to the other top leading brands.

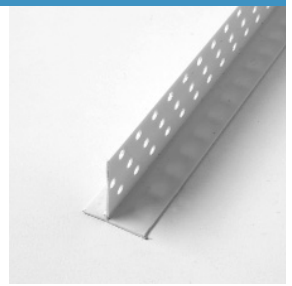
OUR GUARANTEE

You can count on the quality of your customers demand.

L TEAR-STRIP

L configuration with a clean break tear strip; which saves time and creates a cleaner finish.

Lgth	Pcs/Ctn	Ft/Ctn
10'	50	500



J-TRIM

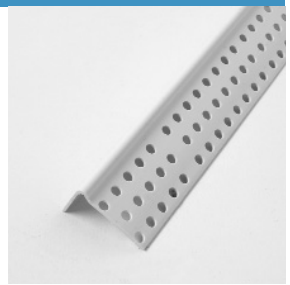
A high quality trim that provides a finished edge at gypsum board stops. Great at ceiling intersections and stops around doors & windows. Readily accepts paint.

Lgth	Pcs/Ctn	Ft/Ctn
8'	50	400
10'	50	500

L-TRIM

A sturdy vinyl trim for mud on applications.

Lgth	Pcs/Ctn	Ft/Ctn
8'	80	640
10'	80	800



CONTROL JOINT / E-Z STRIP

An extruded vinyl expansion control joint designed to allow up to ¼" of movement in veneer plaster and drywall applications.

Lgth	Pcs/Ctn	Ft/Ctn
10'	25	250

1-1/2" RADIUS BULLNOSE CORNER BEAD

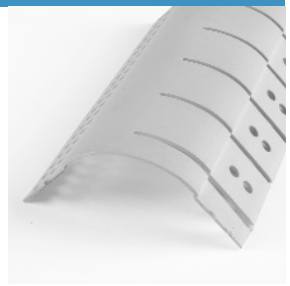
Specially coated for superior finish adhesion and is twice the radius of our standard vinyl bullnose.

Lgth	Pcs/Ctn	Ft/Ctn
8'	30	240
10'	30	300
12'	30	360

1-1/2" RADIUS BULLNOSE ARCHWAY CORNER BEAD

A compliment to our 1½" Bullnose Corner Bead, this bead finishes arches and other curves perfectly.

Lgth	Pcs/Ctn	Ft/Ctn
8'	30	240
10'	30	300



1-1/2" RADIUS SPLAYED BULLNOSE CORNER BEAD

This splay bead adjusts easily to a variety of angles demanding a smoother finished edge.

Lgth	Pcs/Ctn	Ft/Ctn
8'	30	240
10'	30	300

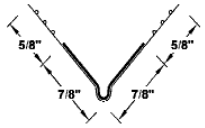
MARINO WARE
QUALITY AND SERVICE COUNT.

DRYWALL FINISHING PRODUCTS

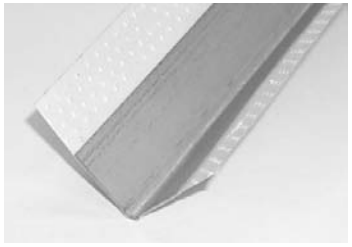
PREMIUM PAPER-FACED METAL PRODUCTS

- Quick and easy installation.
- More absorbency to cure faster and prevent edge cracking.
- More pronounced anchors and dimples for better adherence and proper joint-compound thickness.
- Greater wet strength.
- Resistance to balling or delamination.

EXTRA WIDE OUTSIDE CORNER kwikSTIK
P1XW EL - TAPE ON: PEW

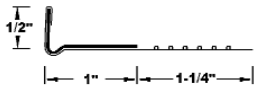


Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500

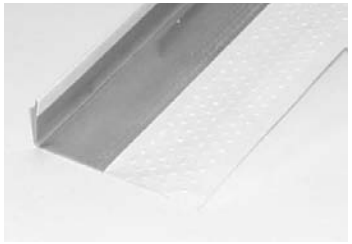


Designed for open angle wall intersections on inside open angle corners.

L 1/2" PAPER TRIM kwikSTIK
P4 - TRIM: PL1



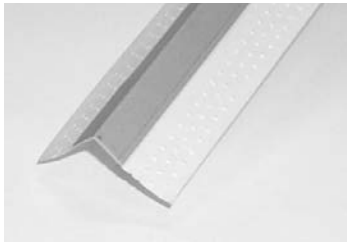
Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500



L-shaped $\frac{1}{2}$" and $\frac{5}{8}$" trim is designed for a clean, professional finish. Best for areas where $\frac{1}{2}$" and $\frac{5}{8}$" drywall runs adjacent to masonry walls, cinder blocks, drop ceilings, beams, unfinished doorways, or door jams.

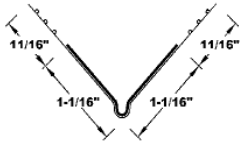
INSIDE CORNER kwikSTIK
P2-TAPE ON: PIC

Lgth	Pcs/Ctn	Ft/Ctn
8'	50	400
9'	50	450
10'	50	500

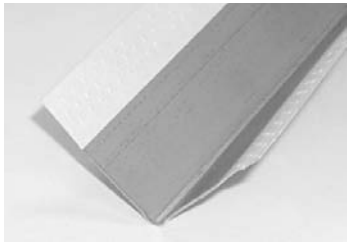


Manufactured for precise inside corners and provides quick and easy installation.

DELUXE SUPER WIDE OUTSIDE CORNER kwikSTIK
P1 DELUXE SUPER WIDE - TAPE ON: PDW

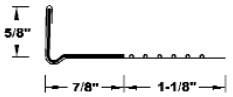


Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500

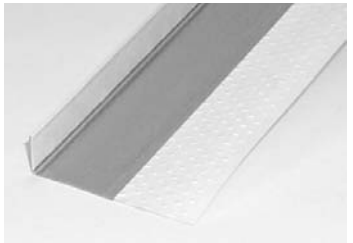


Provides the same extra coverage as P1 Super Wide outside corners and is manufactured with ease and speed of installation in mind.

L 5/8" PAPER TRIM kwikSTIK
P4 - TRIM: PL5

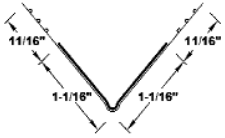


Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500

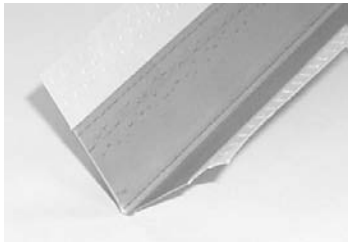


L-shaped $\frac{1}{2}$" and $\frac{5}{8}$" trim is designed for a clean, professional finish. Best for areas where $\frac{1}{2}$" and $\frac{5}{8}$" drywall runs adjacent to masonry walls, cinder blocks, drop ceilings, beams, unfinished doorways, or door jams.

MICRO BEAD OUTSIDE CORNER kwikSTIK
P1 MICRO BEAD -TAPE ON: PIM



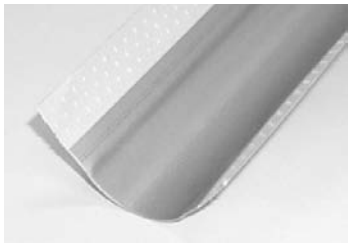
Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500



Manufactured with ease and speed of installation in mind. With the smaller bead and wider flanges, this product goes up fast and requires less mudding, saving both time and money.

SOUTHWESTERN STANDARD BULLNOSE kwikSTIK
SLOK - TAPE ON: PST

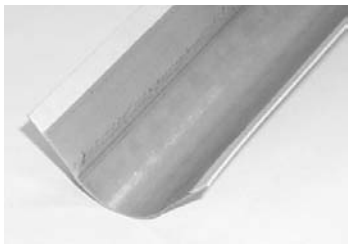
Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500



A less expensive substitute for the $\frac{3}{4}$" bullnose outside corner and offers the same smooth rounded finish. It does not meet all ASTM C1047 standard.

SLOK EXTRA WIDE BULLNOSE kwikSTIK
SLOK NXW - NAIL ON: PEN

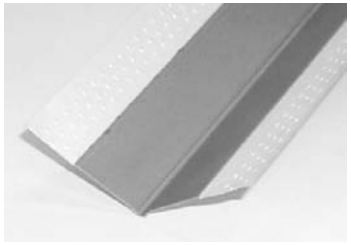
Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500



This bullnose has a wider $\frac{7}{8}$" flange which allows for easier installation and added corner coverage when nails, screws, or staples are being used.

OPEN ANGLE / SPLAY OUTSIDE CORNER kwikSTIK
P1 OS SPLAY -TAPE ON: PSS

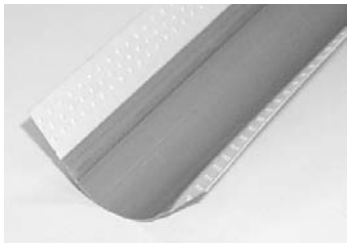
Lgth	Pcs/Ctn	Ft/Ctn
8'	50	400
9'	50	450
10'	50	500



Designed for wider offset outside corners providing easier installation and more consistent mudding.

SLOK BULLNOSE kwikSTIK
SLOK - TAPE ON: PBT

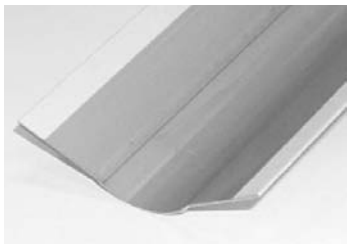
Lgth	Pcs/Ctn	Ft/Ctn
7'	50	350
8'	50	400
9'	50	450
10'	50	500



This bullnose outside corner provides an elegant, smooth finish.

SLOK OPEN ANGLE / SPLAY BULLNOSE kwikSTIK
SLOK NOS - NAIL ON: PAN

Lgth	Pcs/Ctn	Ft/Ctn
8'	50	400
9'	50	450
10'	50	500

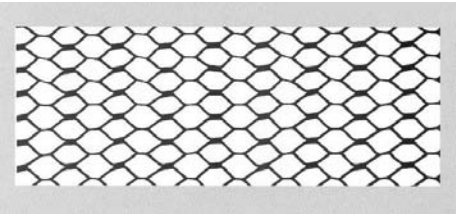


Provides a clean and smooth bullnose finish on offset outside corners where nails, screws, or staples are required.

MARINO WARE
QUALITY AND SERVICE COUNT.

METAL LATH PRODUCTS

DIAMOND MESH LATH



Diamond Mesh Lath

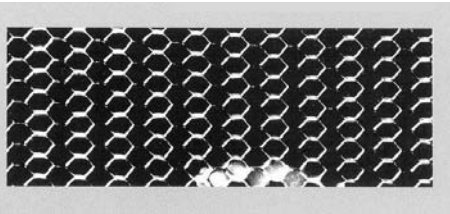
It is manufactured by slitting and stretching galvanized steel to form small opening to allow the keying of plaster so it will bond to the lath. Diamond Mesh Lath can be bent easily to create curved surfaces.

Size: 27" x 96" (686 mm x 2440 mm)

Weights: 1.75 lbs/yd² - (End Not Painted)
2.50 lbs/yd² - Regular (End Painted Blue)
2.50 lbs/yd² - Deluxe (End Painted White)
3.40 lbs/yd² - (End Painted Red)

Approx. Lath Weight		Finish	Bundle Quantity				
			No.	Weight		Area	
lbs/yd²	(kg/m²)	Galv.	Pcs.	lbs.	(kg)	yd²	(m²)
1.75	(0.9)	x	10	35	(15.9)	20	(16.7)
2.50 Regular	(1.1)	x	10	40	(18.2)	20	(16.7)
2.50 Deluxe	(1.4)	x	10	50	(22.7)	20	(16.7)
3.40	(1.8)	x	10	68	(30.8)	20	(16.7)

PAPERBACKED DIAMOND MESH LATH



Paperbacked Diamond Mesh Lath

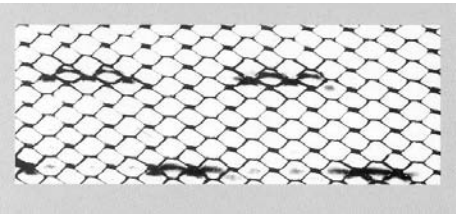
It has an asphalt-impregnated paper factory bonded to the back. The paper conforms to Federal Specification UU-B-790a, type 1, grade D, style 2.

Size: 27" x 96" (686 mm x 2440 mm)

End Painting: Same as non-paperbacked diamond mesh lath.
* Available in all offsets *

Approx. Lath Weight		Finish	Bundle Quantity				
			No.	Weight		Area	
lbs/yd²	(kg/m²)	Galv.	Pcs.	lbs.	(kg)	yd²	(m²)
1.75	(0.9)	x	10	40	(18.2)	20	(16.7)
2.50 Regular	(1.1)	x	10	45	(20.5)	20	(16.7)
2.50 Deluxe	(1.4)	x	10	55	(25.0)	20	(16.7)
3.40	(1.8)	x	10	73	(33.2)	20	(16.7)

SELF-FURRING DIAMOND MESH LATH



Self-Furring Diamond Mesh Lath

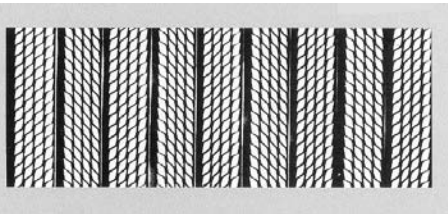
It is the same mesh configuration as Diamond Mesh Lath but made with 1/4" dimple indentations spaced 1-1/2" o.c. each way. Used as exterior stucco base, column fireproofing and re-plastering over old surfaces. Available in galvanized only.

Size: 27" x 96" (686 mm x 2440 mm)

Weights: 1.75 lbs/yd² - (End Not Painted, only Yellow Stripe)
2.50 lbs/yd² - Regular (End Painted Blue w/ Yellow Stripe)
2.50 lbs/yd² - Deluxe (End Painted White w/ Yellow Stripe)
3.40 lbs/yd² - (End Painted Red w/ Yellow Stripe)

Approx. Lath Weight		Finish	Bundle Quantity				
			No.	Weight		Area	
lbs/yd²	(kg/m²)	Galv.	Pcs.	lbs.	(kg)	yd²	(m²)
1.75	(0.9)	x	10	35	(15.9)	20	(16.7)
2.50 Regular	(1.1)	x	10	40	(18.2)	20	(16.7)
2.50 Deluxe	(1.4)	x	10	50	(22.7)	20	(16.7)
3.40	(1.8)	x	10	68	(30.8)	20	(16.7)

3/8" RIB LATH



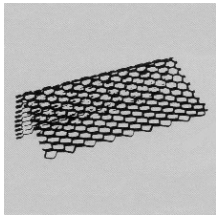
3/8" Rib Lath

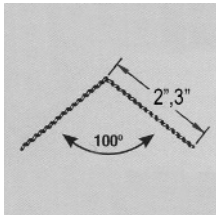
It is chosen for its superior spanning characteristics over all of the common expanded metal laths and is particularly suited for horizontal applications such as ceilings and soffits. Its 3/8" deep ribbed configuration is a self-furring feature. Designed for application on 24" on center.

Size: 27" x 96" (686 mm x 2440 mm)

Approx. Lath Weight		Finish	Bundle Quantity				
			No.	Weight		Area	
lbs/yd²	(kg/m²)	Galv.	Pcs.	lbs.	(kg)	yd²	(m²)
3.40	(1.8)	x	10	68	(30.8)	20	(16.7)

CORNERITE

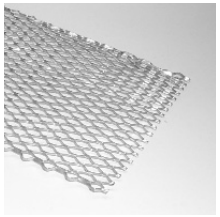


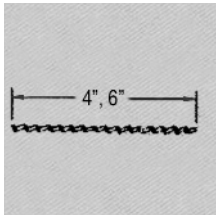


Cornerite

It is an expanded mesh component that is used as corner reinforcement on interior angles where lath is not carried around and over non-ferrous bases such as masonry and wood lath.

STRIP LATH



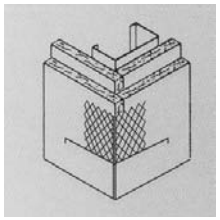


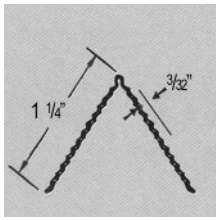
Strip Lath

It is an expanded mesh product used to fill voids in wire lath construction and as a base for wire lath patches.

VENEER PLASTER FINISHING PRODUCTS

VENEER CORNER BEAD



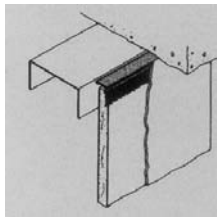


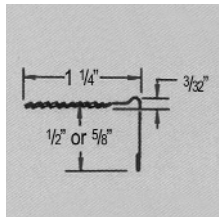
Veneer Corner Bead

It is galvanized steel, used with one-coat or two-coat veneer systems to provide $\frac{3}{32}$" grounds. With $1\frac{1}{4}$" fine mesh flanges, either stapled or nailed, it provides an effective plaster key and eliminates shadowing.

Product	Size		Length		Carton Quantity				
					No.	Weight		Length	
	in.	(mm)	ft.	(mm)	Pcs.	lbs.	(kg)	ft.	(m)
Veneer Corner Bead	1-1/4	(31.8)	8	(2440)	60	40	(18.1)	480	(146.3)
			10	(3050)	60	50	(22.1)	600	(182.9)

VENEER L TRIM



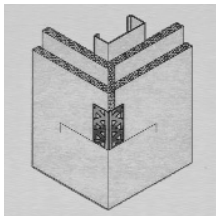


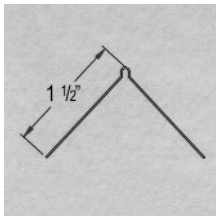
Veneer L Trim

It is used as a veneer plaster stop and as an exposed trim around windows and doors. It is also used in conjunction with veneer corner bead.

Product	Flange Width		Galv.	Length		Carton Quantity				
						No.	Weight		Length	
	in.	(mm)	Finish	ft.	(mm)	Pcs.	lbs.	(kg)	ft.	(m)
Veneer L Trim	1/2	(12.7)	x	10	(3050)	50	41	(18.6)	500	(152.5)
	5/8	(15.9)	x	10	(3050)	50	44	(20.0)	500	(152.5)

K-RITE CORNER BEAD



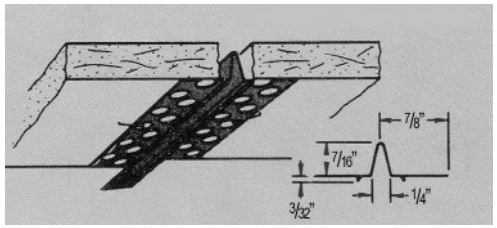


K-Rite Corner Bead

It is a veneer bead used as an alternate to mini mesh veneer bead. It has a $1\frac{1}{2}$" leg and triangle cut-outs for one or two coat veneer plaster application.

Product	Depth or Grounds		Length		Carton Quantity				
					No.	Weight		Length	
	in.	(mm)	ft.	(mm)	Pcs.	lbs.	(kg)	ft.	(m)
K-Rite Corner Bead	1-1/2	(38.1)	8	(2440)	60	58.1	(26.3)	480	(146)
			9	(2730)	60	65.3	(29.6)	600	(165)
			10	(3050)	60	72.6	(32.9)	600	(183)
			12	(3657)	60	87.1	(39.5)	600	(219)

ZINC CONTROL JOINT 093



Limitation: where sound transmission and/or fire ratings are prime considerations, an adequate seal must be provided behind the control joint.

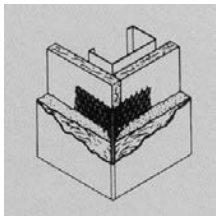
Zinc Control Joint No. 093

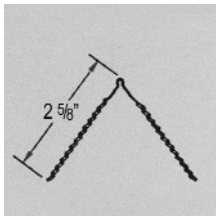
It is used to relieve the stresses from expansion and contraction across the joint in large ceiling and wall areas in drywall and veneer finish systems. It is used from floor to ceiling in long partition runs and from door header to ceiling. It is also recommended for repair of existing plastered masonry. Made of roll-formed zinc to resist corrosion, it has $\frac{3}{32}$" grounds. Plastic tape protects $\frac{1}{4}$" wide x $\frac{7}{16}$" deep opening, and is to be removed after installation.

MARINO WARE
QUALITY AND SERVICE COUNT.

PLASTER FINISHING PRODUCTS

1-A EXPANDED CORNER BEAD



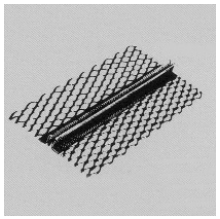


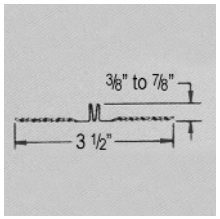
1-A Expanded Corner Bead

It is available in zinc or galvanized steel. Wide expanded flanges are easily flexed. Preferred for irregular corners. It provides increased reinforcement close to the nose of the bead. Zinc should be used for exterior applications.

Product	Size		Length		Carton Quantity No. Pcs.	Weight lbs.	Weight (kg)	Length ft.	Length (m)
	in.	(mm)	ft.	(m)					
1-A Expanded Corner Bead, Galvanized	2-5/8	(66.7)	8	(2.44)	30	52	(23.6)	240	(73.2)
			10	(3.05)	30	56	(25.5)	300	(91.4)
1-A Expanded Corner Bead, Zinc	2-5/8	(66.7)	10	(3.05)	30	48	(21.8)	300	(91.4)

DOUBLE V EXPANSION JOINT



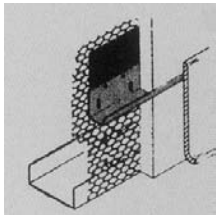


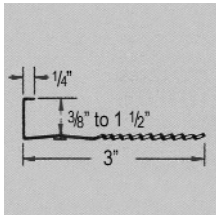
Double V Expansion Joint

It relieves the stresses of expansion and contraction in large plaster areas. It is available in zinc or galvanized steel. Zinc should be used for exterior applications.

Product	Flange Width		Length		Carton Quantity No. Pcs.	Weight lbs.	Weight (kg)	Length ft.	Length (m)
	in.	(mm)	ft.	(m)					
Double V Expansion Joint, Galvanized	3/8	(9.5)	10	(3.05)	24	48	(21.8)	240	(73.2)
	1/2	(12.7)	10	(3.05)	24	66	(30.0)	240	(73.2)
	3/4	(19.1)	10	(3.05)	24	74	(33.6)	240	(73.2)
	7/8	(22.2)	10	(3.05)	24	83	(37.7)	240	(73.2)

#66 EXPANDED FLANGE CASING BEAD



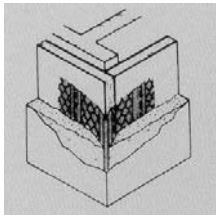


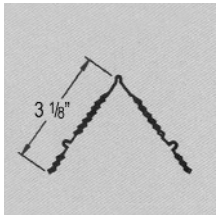
#66 Expanded Flange Casing Bead

It is used as a plaster stop and as exposed trim around window and door openings. It is also recommended at the junction or the intersection of plaster and other wall or ceiling finishes. Zinc should be used for exterior applications.

Product	Depth or Grounds		Length		Carton Quantity No. Pcs.	Weight lbs.	Weight (kg)	Length ft.	Length (m)
	in.	(mm)	ft.	(m)					
#66 Expanded Flange Casing Bead, Galvanized	3/8	(9.5)	10	(3.05)	30	48	(21.8)	300	(91.4)
	1/2	(12.7)	10	(3.05)	30	55	(24.9)	300	(91.4)
	5/8	(15.9)	10	(3.05)	30	56	(25.5)	300	(91.4)
	3/4	(19.1)	10	(3.05)	30	58	(26.4)	300	(91.4)
	7/8	(22.2)	10	(3.05)	30	62	(28.2)	300	(91.4)
	1-1/4	(31.8)	10	(3.05)	30	68	(31.0)	300	(91.4)
	1-1/2	(38.1)	10	(3.05)	30	72	(32.7)	300	(91.4)
#66 Expanded Flange Casing Bead, Zinc	1/2	(12.7)	10	(3.05)	30	51	(23.2)	300	(91.4)
	7/8	(22.2)	10	(3.05)	30	59	(26.8)	300	(91.4)

DOUBLE X CORNER BEAD



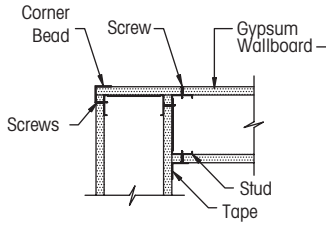


Double X Corner Bead

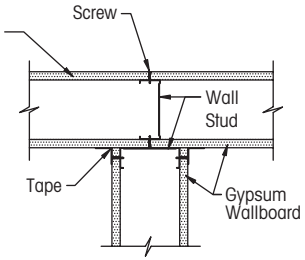
It is galvanized steel and has full 3 1/8" flanges. It is easily adjusted for plaster depth on columns and is ideal for structural tile corners with rough masonry. Double X Corner Bead has perforated stiffening ribs along the expanded flanges.

Product	Flange Width		Length		Carton Quantity No. Pcs.	Weight lbs.	Weight (kg)	Length ft.	Length (m)
	in.	(mm)	ft.	(m)					
Double X Corner Bead	3-1/8	(82.6)	8	(2.44)	24	61	(27.7)	240	(73.2)
			9	(2.74)	24	69	(31.4)	270	(82.3)
			10	(3.05)	24	76	(34.5)	300	(91.4)
			12	(3.66)	24	91	(41.4)	360	(109.7)

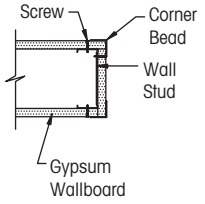
SUGGESTED FRAMING DETAILS



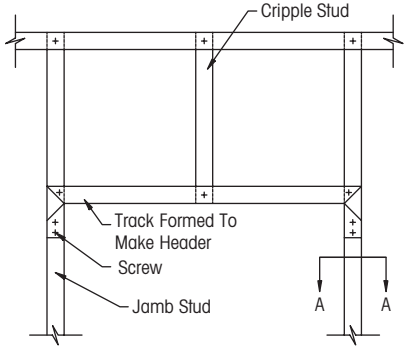
WALL CORNER DRYWALL STUDS



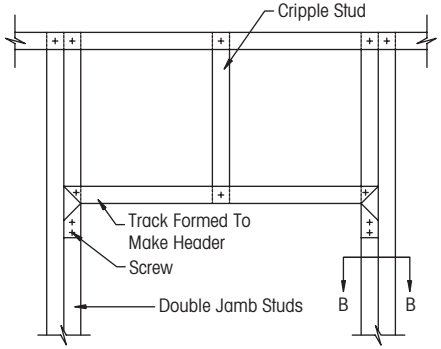
PARTITION INTERSECTION



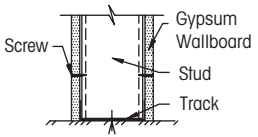
PARTITION END



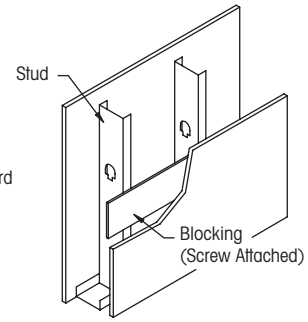
FRAMING ELEVATION AT OPENING (LIGHT)



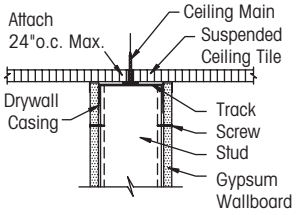
FRAMING ELEVATION AT OPENING (HEAVY)



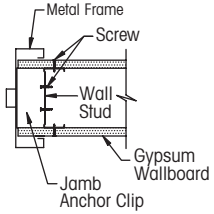
BOTTOM ATTACHMENT



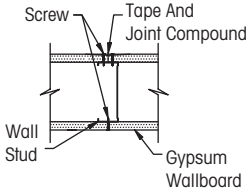
STRAP BRIDGING



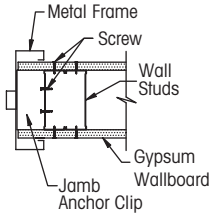
TOP ATTACHMENT TO CEILING GRID



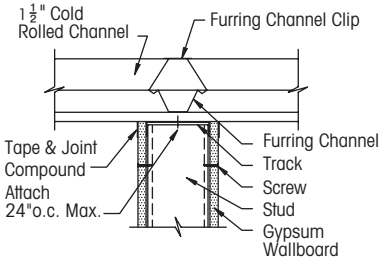
JAMB DETAIL "A" (LIGHT)



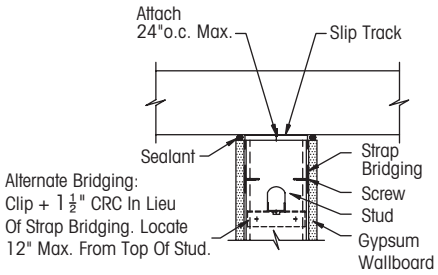
GYPSUM BOARD ATTACHMENT



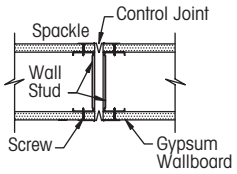
JAMB DETAIL "B" (HEAVY)



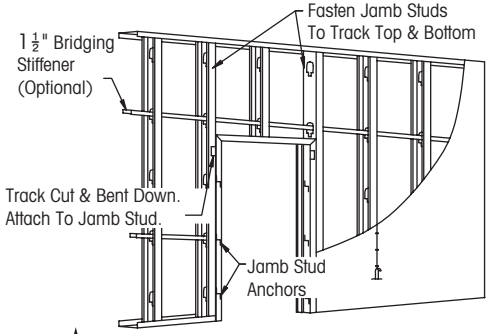
TOP ATTACHMENT TO FURRED CEILING



SINGLE TRACK SLIP DETAIL



CONTROL JOINT



TYPICAL FRAME DOOR OPENING

MARINO WARE

QUALITY AND SERVICE COUNT.

www.marinoware.com • sales@marinoware.com • engineering@marinoware.com

NEW JERSEY FACILITY
400 Metuchen Road
South Plainfield, NJ 07080
(800) 627-4661
(908) 757-9000
(908) 412-1442 FAX

GEORGIA FACILITY
777 Greenbelt Parkway
Griffin, GA 30223
(800) 504-8199
(678) 688-1312
(678) 688-1379 FAX

INDIANA FACILITY
4245 Railroad Avenue
East Chicago, IN 46312
(866) 636-6002
(219) 378-7100
(219) 378-7106 FAX

TEXAS FACILITY
10101 Bay Area Boulevard
Pasadena, TX 77507
(866) 852-9510
(281) 283-8100
(281) 283-8105 FAX

NEW YORK SALES OFFICE
137 Broadway, Suite B
Amityville, NY 11701
(800) 627-4667
(631) 691-2200
(631) 691-1492 FAX

ENGINEERING OFFICE
175 Country Club Drive, Suite 200A
Stockbridge, GA 30281
(866) 545-1545
(770) 507-2600
(770) 507-2605 FAX

© 2006 Marino\WARE, a division of Ware Industries. All Rights Reserved.

M\W 11-2006