SYMONS®
BY DAYTON SUPERIOR

SYM-PLY®

QUICK INSTALL GUIDE

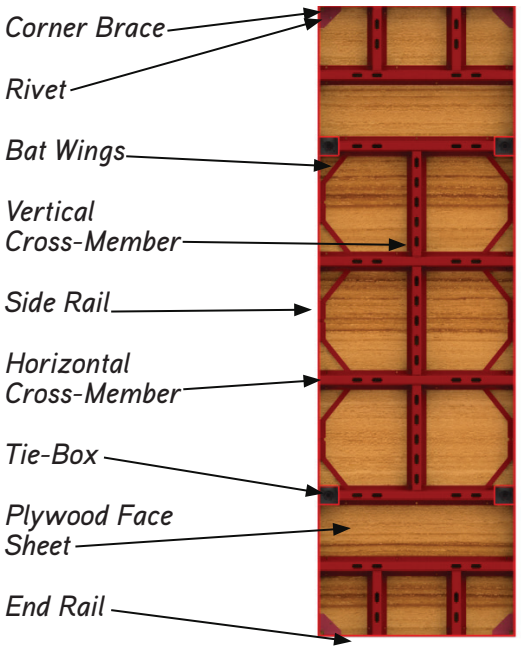
INTRODUCTION

The Sym-Ply components and accessories illustrated herein have been designed with safety and performance in mind to help achieve a safe and productive forming operation. It's recommended that all construction personnel thoroughly familiarize themselves and comply with the applicable industry standards and safe practices established by the American Concrete Institute (ACI), American National Standards Institute (ANSI), The Occupational Safety and Health Administration (OSHA), and the Scaffolding, Shoring and Forming Institute (SSFI). Refer to ties section for tie capacities. The maximum allowable pour pressure for the SYM-PLY® system is 1500 psf.

SYSTEM BASICS

- Panels are Light weight – Approx. 8lbs/ft2
- Maximum pour pressure of 1,500 psf.
- All-Steel frame with an inset 19/32" plywood face
- At Symons, we offer over 100 standard Panel and Filler sizes
- We offer Sym-Ply at all locations for rent or purchase
- 100% Compatible with Steel-Ply

PANEL NOMENCLATURE



SYM-CLAMP SPACING CHART

Height	Pressure	Load (Lbs.) per panel Width (At Every Foot Up Wall)						Spacing (Ft.) Per Width (Theoretical)						Spacing (Ft.) Per Panel Width (Final)					
Ft.	PSF	36	30	24	18	12	6	36	30	24	18	12	6	36	30	24	18	12	6
1	150	113	94	75	56	38	19	44.4	53.3	66.7	88.9	133.3	266.7	3.5	3.5	3.5	3.5	3.5	3.5
2	300	338	281	225	169	113	56	14.8	17.6	22.2	29.6	44.4	88.9	3.5	3.5	3.5	3.5	3.5	3.5
3	450	563	469	375	281	188	94	8.9	10.7	13.3	17.8	26.7	53.3	3.5	3.5	3.5	3.5	3.5	3.5
4	600	788	656	525	394	263	131	6.3	7.6	9.5	12.7	19	38.1	3.5	3.5	3.5	3.5	3.5	3.5
5	750	1013	844	675	506	338	169	4.9	5.9	7.4	9.9	14.8	29.6	3.5	3.5	3.5	3.5	3.5	3.5
6	900	1238	1031	825	619	413	206	4	4.8	6.1	8.1	12.1	24.2	3	3.5	3.5	3.5	3.5	3.5
7	1050	1463	1219	975	731	488	244	3.4	4.1	5.1	6.8	10.3	20.5	2.5	3	3.5	3.5	3.5	3.5
8	1200	1688	1406	1125	844	563	281	3	3.6	4.4	5.9	8.9	17.8	2	2.5	3.5	3.5	3.5	3.5
9	1350	1913	1594	1275	956	638	319	2.6	3.1	3.9	5.2	7.8	15.7	2	2.5	3	3.5	3.5	3.5
10	1500	2138	1781	1425	1069	713	356	2.3	2.8	3.5	4.7	7	14	2	2	3	3.5	3.5	3.5
11	1500	2250	1875	1500	1125	750	375	2.2	2.7	3.3	4.4	6.7	13.3	1.5	2	2.5	3	3.5	3.5
12	1500	2250	1875	1500	1125	750	375	2.2	2.7	3.3	4.4	6.7	13.3	1.5	2	2.5	3	3.5	3.5
13	1500	2250	1875	1500	1125	750	375	2.2	2.7	3.3	4.4	6.7	13.3	1.5	2	2.5	3	3.5	3.5
14	1500	2250	1875	1500	1125	750	375	2.2	2.7	3.3	4.4	6.7	13.3	1.5	2	2.5	3	3.5	3.5
15	1500	2250	1875	1500	1125	750	375	2.2	2.7	3.3	4.4	6.7	13.3	1.5	2	2.5	3	3.5	3.5
16	1500	2250	1875	1500	1125	750	375	2.2	2.7	3.3	4.4	6.7	13.3	1.5	2	2.5	3	3.5	3.5

CONCRETE POUR PRESSURE CHART

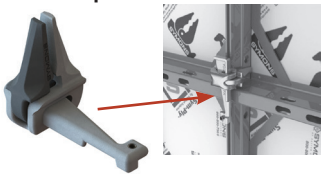
TABLE 1
MAXIMUM LATERAL CONCRETE PRESSURE

RATE OF PLACEMENT R, FT. PER HR.	90°F		80°F		70°F		60°F		50°F		40°F	
	WALLS	COLUMNS	WALLS	COLUMNS	WALLS	COLUMNS	WALLS	COLUMNS	WALLS	COLUMNS	WALLS	COLUMNS
1	663	250	728	263	810	279	920	300	1074	330	1305	375
2	694	350	763	375	850	407	967	450	1130	510	1375	600
3	726	450	798	488	890	536	1013	600	1186	690	1445	825
4	757	550	833	600	930	664	1060	750	1242	870	1515	1050
5	788	650	868	713	970	793	1107	900	1298	1050	1585	1275
6	816	750	903	825	1010	921	1153	1050	1354	1230	1655	1500
7	850	850	938	938	1050	1050	1200	1200	1410	1410	1725	1725
8	881	950	973	1050	1090	1179	1247	1350	1466	1590	1795	1950
9	912	1050	1008	1163	1130	1307	1293	1500	1522	1770	1865	2175
10	943	1150	1043	1275	1170	1436	1340	1650	1578	1950	1935	2400
11	974	1250	1078	1388	1210	1564	1387	1800	1634	2130	—	2625
12	1006	1350	1113	1500	1250	1693	1433	1950	1690	2310	—	2850
13	1037	1450	1148	1613	1290	1821	1480	2100	1746	2490	—	—
14	1068	1550	1183	1725	1330	1950	1527	2250	1802	2670	—	—
15	1099	1650	1218	1838	1370	2079	1573	2400	1858	2850	—	—

NOTES:
1. DATA PROVIDED IN THIS TABLE IS FOR INFORMATIONAL PURPOSES ONLY. FINAL DESIGN SHALL BE BASED ON ACI 347R–14.
2. INDICATED CONCRETE PRESSURE VALUES MUST BE MULTIPLIED BY APPROPRIATE UNIT WEIGHT (Cw) AND CHEMISTRY (Cc) COEFFICIENTS AS DEFINED IN TABLES 2 AND 3 BELOW.
3. THIS TABLE IS ONLY VALID FOR CONCRETE WITH A SLUMP LESS THAN OR EQUAL TO 7" MEASURED AFTER THE ADDITION OF ALL ADMIXTURES.
4. INTERNAL VIBRATION SHALL BE LIMITED TO A DEPTH OF NO MORE THAN 4', NO OTHER MEANS OF VIBRATION ARE PERMITTED.
5. WALLS ARE DEFINED AS VERTICAL ELEMENTS WITH AT LEAST ONE PLAN DIMENSION EXCEEDING 6'–6".
6. MAXIMUM PRESSURE FOR WALLS LESS THAN 14' IN HEIGHT WITH A POUR RATE LESS THAN 7 FT/HR MAY BE CONSIDERED COLUMNS.
7. COLUMNS ARE DEFINED AS VERTICAL ELEMENTS WITH NO PLAN DIMENSION EXCEEDING 6'–6".
8. RE–VIBRATION OF SETTING CONCRETE WILL CAUSE THE CONCRETE TO REVERT BACK TO A LIQUID STATE. IF RE–VIBRATION IS REQUIRED, THE LATERAL PRESSURE MUST BE CALCULATED AS FULL LIQUID HEAD TO THE DEPTH OF THE RE–VIBRATION.

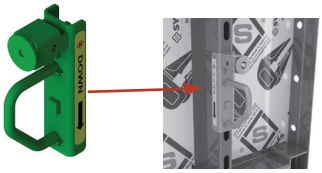
KEY COMPONENTS

SYM-Clamp



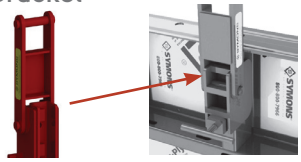
- 5,000 lbs. SWL
- 2:1 F.O.S.
- Lightweight, 3.5 lbs.
- Primary attachment mode
- Tool-Free Setup

Tie-Off Bracket



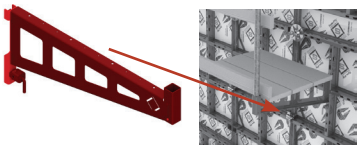
- The installation of Tie-Off Brackets on Sym-Ply panels allows easy attachment of safety belts
- The Safety Eye meets the requirements of OSHA (29 CFR Part 1926) subpart M 1926.502d15

Lift Bracket



- Used in gang form application
- 3,000 lbs. SWL
- 5:1 Factor of Safety

Walkway Bracket



- 500 lbs. SWL
- Provides for work platform creation
- 4:1 Factor of Safety
- 13.7 lbs.
- Max 8' center to center

TIE LOAD RATINGS

Safe Load Ratings

15 MM Taper Ties				
Part Code	**15 mm Tie**	**Weight (lbs.)**	**Safe Working Load (Lbs.)**	**Ultimate Load (lbs.)**
FSW667023	41" Taper Tie	5.1	18,750	37,520
FSW667022	49" Taper Tie	6.5	18,750	37,520
FSW667021	57" Taper Tie	7.9	18,750	37,520
FSW667020	65" Taper Tie	9.3	18,750	37,520
20 MM Taper Ties				
Part Code	**20 mm Tie**	**Weight (lbs.)**	**Safe Working Load (Lbs.)**	**Ultimate Load (lbs.)**
145555	37" Taper Tie	8.2	32,500	65,000
145556	47" Taper Tie	11	32,500	65,000
145557	57" Taper Tie	13.9	32,500	65,000
145558	67" Taper Tie	15.8	32,500	65,000

Taper Tie Accessories		
Part Code	**Description**	**Weight**
F722110	4" x 6" 15 MM Tie Plate	2.8 lbs.
F56354	7" DIA 15 MM Tie Plate	5.2 lbs.
F54557	15 MM Tie Nut	1 lbs.
123605	20mm B12AW Wing Nut	1.51 lbs.
145554	20 MM Swivel Nut w/ 7" Tie Plate	5.94 lbs.