



Complementing the already popular Maxim® Operator & Hinge System, the new Maxim® Locking System proves to be the most attractive, easiest operating, highest performing, best value in casement and awning window locking hardware.

Check out these amazing features & benefits:

ORDERING & INSTALLATION MADE SIMPLE

- Non-Handed - You will like the advantage of ordering and inventorying just one lock for both left- and right-hand windows.
- Quick and easy lock-to-tie bar attachment and the simple one-piece lock support plates reduce installation time.
- Most current Truth #24.84 lock system users will be able to use their current tie bar guides and keepers with the new Maxim lock and tie bar models.
- On casement windows the addition of a lock point below the handle improves sealing and lock-up
- Maxim offers a single point system for awning windows using existing stainless steel keepers. No tie bars or tie bar guides required.
- Custom-designed, profile-specific tie bar guides and keepers offer maximum hardware application flexibility. Guides “index” (locate) the tie bars in two directions for consistent and efficient application. (Contact Truth, or refer to catalog drawing details, to identify correct guides and keepers for your profile).
- An optional gasket, installed around the base ensures the assembly is tightly sealed to protect against air, water, and light infiltration.
- New tie bar models offer the benefit of a lock point below the lock itself when used with the Maxim System. Truth’s #24.84 Multi-Point Lock will also use the new tie bar models, however the lock-below feature is not available.

CONSUMER ADVANTAGES

- Secure, solid detent lets you “feel” when the Maxim System is locked.
- The unique design makes the lock highly pick-resistant.
- Homeowners will appreciate the excellent “reach-out” capability. No need to fully close the window before locking it. Just close the window to within .625” (15.8 mm) and actuate the lock handle.
- The heart of this system is the “progressive” locking action. Watch as the tie bar engages and pulls in the lowest lock point first, followed by the remaining keeper(s) in sequence. This “zippered effect” assures the top lock point on tall units always engages and pulls in, even in less-than-perfect installations. Feel the smooth and easy lock operation the sequential lock action also provides.

ATTRACTIVE LOOK

- Multi-Point Locks for Casement (#24.30, #24.31 & #24.33 models) and Single-Point Locks for awning (#24.32) look identical – for a consistent appearance throughout the home.
- Contemporary aesthetics and styling complement the Maxim Operator System.
- With its sleek, low-profile design, homeowners will love the fact that in either the locked or unlocked position, these locks won’t interfere with curtains or blinds.
- With its attractive painted finish, the zinc handle & base precisely match the color of your vinyl profile.

WARRANTY:

Protected under the terms of the Truth Warranty for Window and Door Manufacturers and Authorized Distributors. Refer to Truth’s Terms and Conditions for further details.



MATERIAL & PROTECTIVE FINISH:

High pressure zinc die-cast handle, case, and sliders (liquid or powder coat painted finish). Steel tie bar (powder coat painted finish). Keepers made of either E-Gard® Hardware, steel or UV stabilized acetal.

E-GARD® HARDWARE

Truth's E-Gard® Hardware has a multi-stage coating process that produces a superior physical and aesthetic finish. Plus, it is resistant to a wider range of corrosive materials, including industrial cleaning materials and environmental pollutants. This proprietary process has been tested to perform approximately three times better than common zinc plated finishes.

FINISH:

Electrostatically applied, durable coatings that provide excellent resistance to chipping, scratching and corrosion while maintaining color stability for years in direct sunlight. Please refer to Truth's Color Chart for examples of Truth's most popular finish options. Truth also offers a wide range of decorative "plated" finishes - contact Truth for additional information on availability of these finishes on specific product lines.

ORDERING INFORMATION:

If application assistance is needed, please contact Truth Hardware's Product Specialists.

1. Order Casement or Awning Maxim® Sash Lock by part number.

Casement Multi-Point Locks

#24.30 Multi-Point (short slider)

#24.31 Multi-Point (long slider)

#24.33 Multi-Point (medium slider)

Awning Lock

#24.32 Maxim Single Point

2. Specify finish number.
3. Specify gasket (.002) or non-gasket (.001) model.

4. Order keepers by part number - refer Fig. 10-20.
5. Specify tie bar needed by length - refer to Fig. 5 & 6.
6. Specify Tie Bar Guides by number - refer to Fig. 7.

RECOMMENDED SCREWS:

Types of screws required determined by material of profile used. See Tech Note #11. Refer to drawings for complete information on screw type and quantity needed (sold separately).

TRUTH TIPS:

1. For accurate hardware placement in vinyl or metal applications, pre-drilling of the window profile is recommended.
2. For vinyl window applications, mounting screws should pass through two PVC walls, or one PVC wall and one insert wall. For this reason, it may be necessary to use a longer screw than is recommended.
3. For power drivers used to install mounting screws, recommended torque for screw installation (#19298) is 35 in./lbs; not to exceed 50 in./lbs.
4. For metal window profiles, Truth recommends machine screws. However, in most applications, sheet metal screws will provide adequate holding power.
5. Truth recommends the use of a Snubber at the center of the hinge side on any casement window which has a tendency to bow outwardly at the center in the closed position. Adding a Snubber may increase the negative air pressure rating of the window.

INCLUDE TRUTH SPECS ON YOUR NEXT WINDOW PROJECT

Window locking system shall be included which will increase both security and weather seal tightness. The locking points must hold securely for negative air pressure and forced entry resistance.

Window sash locks will be used which provide sequential locking with up to .625" (15.9 mm) of pull-in. The lock must utilize a tie bar driven by a single locking handle to meet ADA hardware height standards. The lock drive handle must provide a weather tight seal by providing a gasket between lock and window frame. The lock shall be constructed of high pressure zinc alloy die castings and either painted or E-Gard® components and accessories.

Window locks shall be 24 series, Maxim® Multi and Single Point Lock Systems as manufactured by Truth Hardware, Owatonna, MN.

HARDWARE SELECTION FOR MAXIM® MULTI AND SINGLE POINT LOCKS:

Casement Windows

Lock Selection

- Choose a lock based on the hardware cavity depth available.
See J dimension if Fig. 1. Choose lock from Fig. 3.

Keeper and Tie Bar Guide Selection

The keeper and tie bar guide need to be selected together. To aid in your hardware selection, you need to consider:

- Hardware Cavity Size. If you currently use the Truth Hardware 24.84 Multi-point system, chances are the same Tie Bar Guide and Keeper can be used with the new Maxim Lock system.
- Refer to Fig. 1. Dimensions given for keepers and tie bar guides are to the center of tie bar roller/keeper engagement point. These dimensions will allow you to choose the appropriate components based on your hardware cavity dimensions. Choose a Tie Bar Guide with an **E** dimension and a keeper with a **K** dimension that add up as close as possible to the cavity dimensions available.
 - Be aware that the Tie Bar Guide height impacts both the keeper selection as well as the lock's horizontal location on the frame. It is important that the lock be positioned to allow clearance for Support Plate (see fig. 8), if used.
- Mounting screw location - Choose components that will place the mounting screws where they will

have strongest engagement (i.e. - screws should engage a double wall of vinyl or screw boss or insert).

- Keeper/weather-strip interference can occur as the window closes and must be considered when selecting a Tie Bar Guide and Keeper.

Tie Bar Selection

- **Cone Verses Interlock -**
 - Interlock tie bars - Over-size rivet head minimizes the potential for the keeper to slip off the roller in performance testing. Also, there are more Interlock keeper options/models to choose from.
 - Cone tie bar - Tapered roller and keepers.
- Make sure selected tie bar and keeper models are the same series - both Cone or both Interlock style.

Awning Windows

- #24.32 (Fig. 4) - Single Point Lock

Keeper selection

- Select a keeper with or without positive pick-up tab. (See fig. 21 and 22) A keeper with positive pick-up tab will give better negative air pressure and forced entry ratings, however they are more sensitive to mounting tolerances.

Select a keeper with the appropriate **M** dimension based on the centerline of the lock housing.

24 MAXIM® MULTI-POINT & SINGLE POINT LOCKING SYSTEMS

FIG. 1 MAXIM MULTI-POINT APPLICATION INTERLOCK ROLLERS

REFER TO CATALOG "HARDWARE SELECTION INSTRUCTIONS" FOR STEP-BY-STEP HARDWARE SECTION ASSISTANCE. IF FURTHER ASSISTANCE IS NEEDED, CALL TRUTH HARDWARE PRODUCT SPECIALIST.

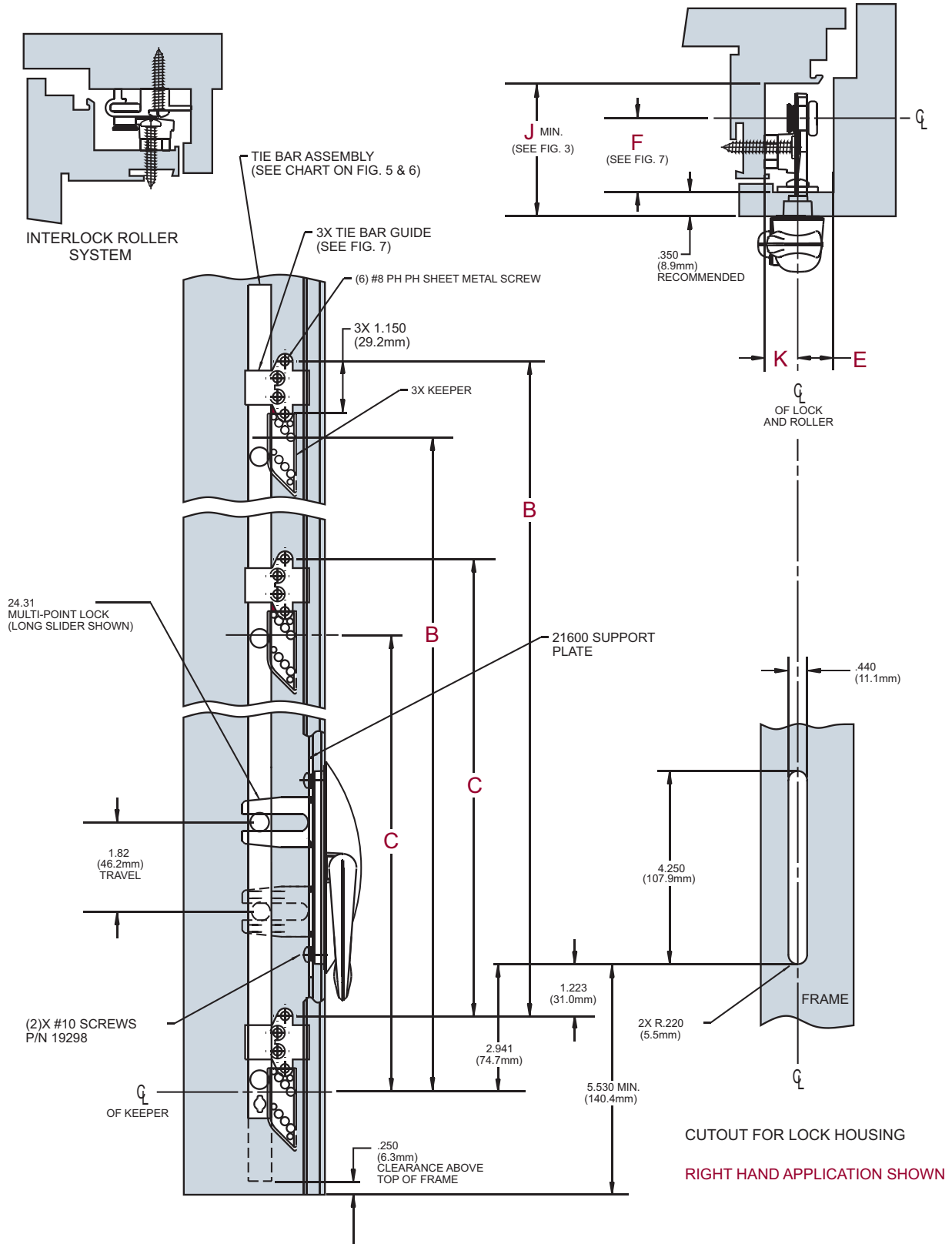
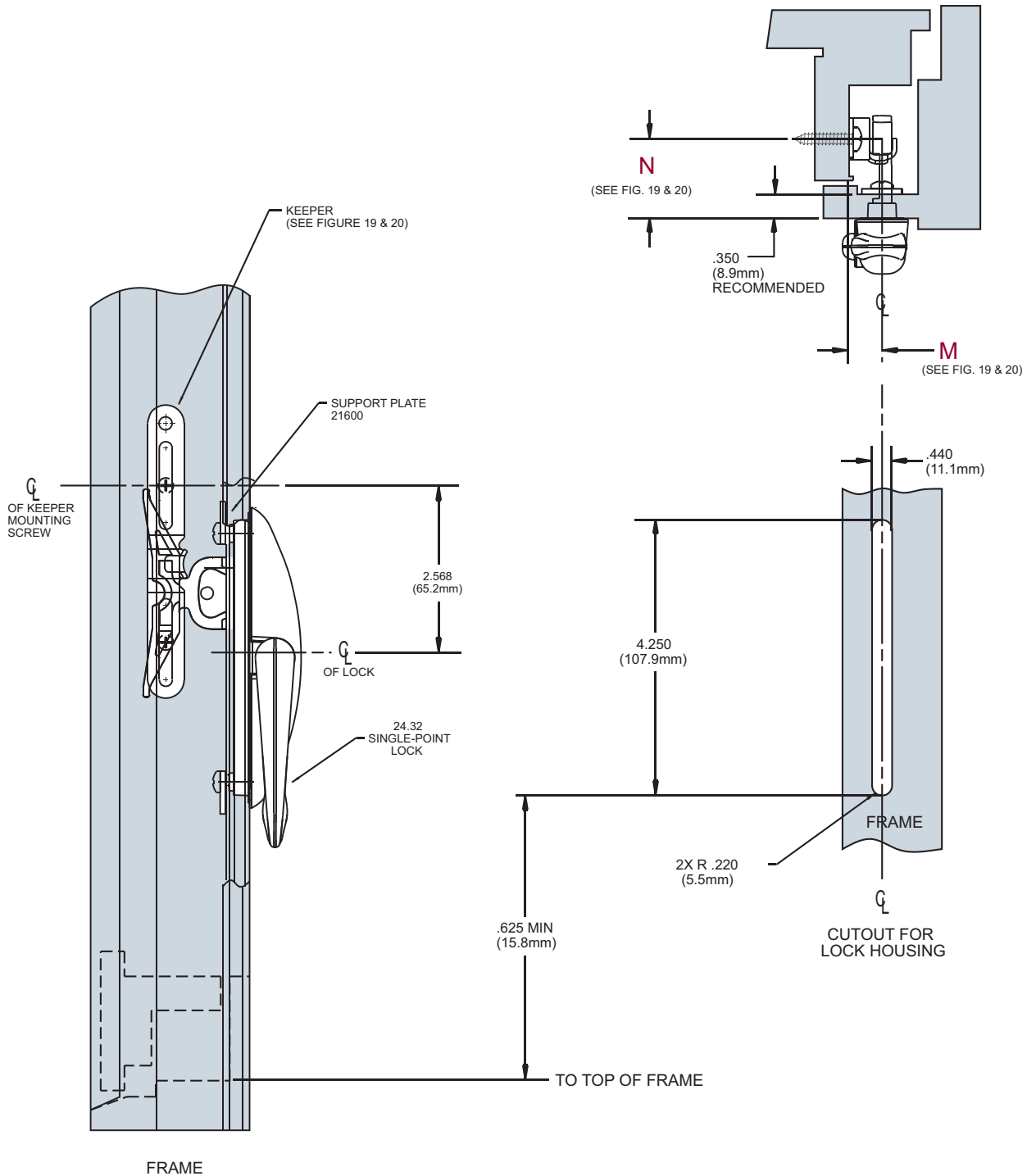


FIG. 2 MAXIM SINGLE-POINT / AWNING APPLICATION

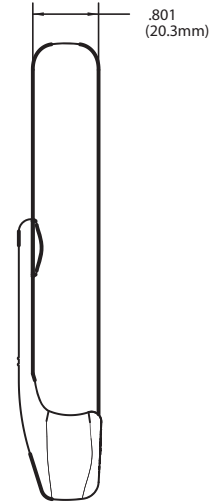
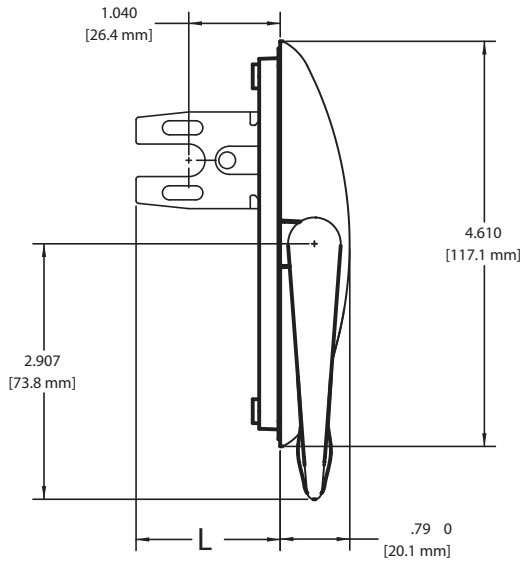
REFER TO CATALOG COPY "HARDWARE SELECTION INSTRUCTIONS" FOR STEP-BY-STEP HARDWARE SELECTION ASSISTANCE. IF FURTHER ASSISTANCE IS NEEDED, CALL TRUTHHARDWARE PRODUCT SPECIALIST.



RIGHT HAND APPLICATION SHOWN

24 MAXIM® MULTI-POINT & SINGLE POINT LOCKING SYSTEMS

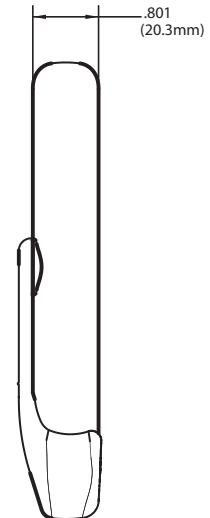
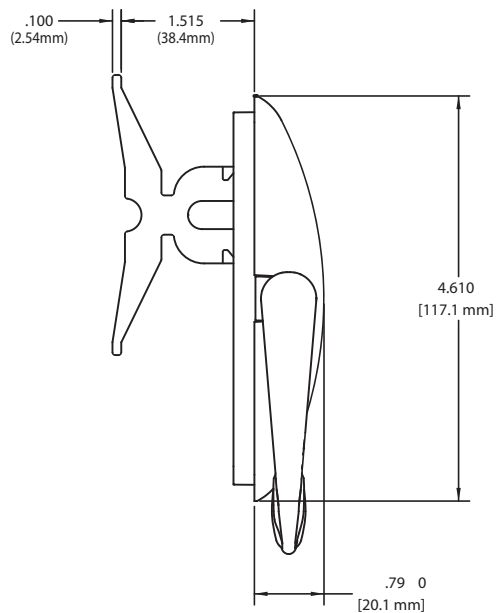
FIG. 3 MAXIM MULTI-POINT LOCK



RECOMMENDED SCREWS:
2-P/N 19298 #10-24 PH PH THREAD
FORMING MACHINE SCREW

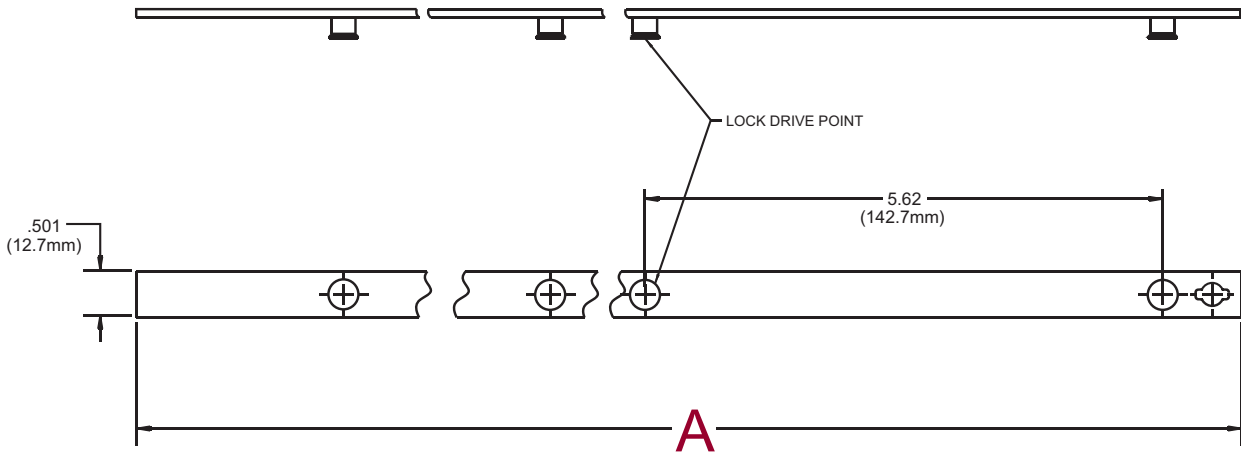
PART NO.	L	J SEE FIG. 1
24.30	1.390	1.450
24.31	1.890	1.950
24.33	1.640	1.700

FIG. 4 24.32 MAXIM SINGLE-POINT LOCK (AWNING)



RECOMMENDED SCREWS:
2-P/N 19298 #10-24 PH PH THREAD
FORMING MACHINE SCREW

FIG. 5 TIE BAR CHART FOR INTERLOCK ROLLER



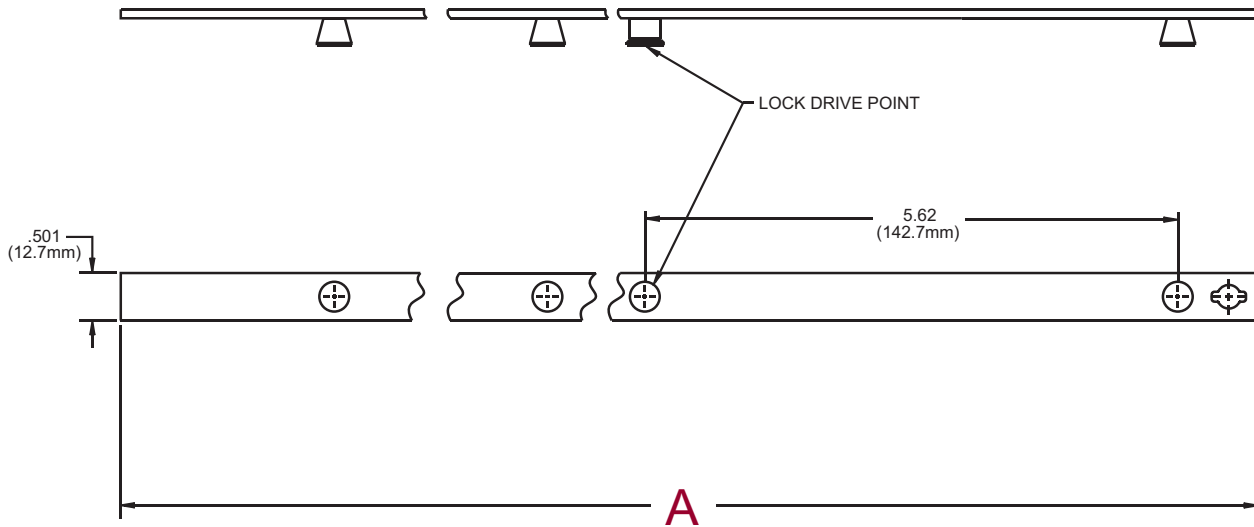
RECOMMENDED FRAME SIZE (MIN.)	TIE BAR ASSEMBLY						
	PART NO.			"A" DIM	"B" DIM SEE FIG.1	"C" DIM SEE FIG.1	"D" DIM SEE FIG.1
	2 ROLLERS	3 ROLLERS	4 ROLLERS				
21in (533.4mm)	11901	NA	NA	14.9 (378.5mm)	11.00 (279.4mm)	NA	NA
25in (635.0mm)	11902	NA	NA	18.9 (480.1mm)	15.00 (381.0mm)	NA	NA
29in (736.6mm)	11903	11913	NA	22.9 (581.7mm)	19.00 (482.6mm)	10.00 (254.0mm)	NA
33in (838.2mm)	11904	11914	NA	26.9 (683.3mm)	23.00 (584.2mm)	12.00 (304.8mm)	NA
37in (939.8mm)	11905	11915	NA	30.9 (784.9mm)	27.00 (685.8mm)	14.00 (355.6mm)	NA
41in (1041.4mm)	11906	11916	NA	34.9 (886.5mm)	31.00 (787.4mm)	16.00 (406.4mm)	NA
45in (1143.0mm)	11907	11917	NA	38.9 (988.1mm)	35.00 (889.0mm)	18.00 (457.2mm)	NA
49in (1244.6mm)	11908	11918	NA	42.9 (1089.7mm)	39.00 (990.6mm)	20.00 (508.0mm)	NA
53in (1346.2mm)	11909	11919	NA	46.9 (1191.3mm)	43.00 (1092.2mm)	22.00 (558.8mm)	NA
57in (1447.8mm)	11910	11920	NA	50.9 (1292.9mm)	47.00 (1193.8mm)	24.00 (609.6mm)	NA
61in (1549.4mm)	11911	11921	NA	54.9 (1394.5mm)	51.00 (1295.4mm)	26.00 (660.4mm)	NA
65in (1651.0mm)	11912	11922	NA	58.9 (1496.1mm)	55.00 (1397.0mm)	28.00 (711.2mm)	NA
69in (1752.6mm)	NA	NA	11945	62.9 (1597.6mm)	59.00 (1498.6mm)	39.56 (1004.8mm)	19.78 (50.2mm)
73in (1854.2mm)	NA	NA	11946	66.9 (1699.2mm)	63.00 (1600.2mm)	42.22 (1072.3mm)	21.11 (536.1mm)
77in (1955.8mm)	NA	NA	11947	70.9 (1800.8mm)	67.00 (1701.8mm)	44.89 (1140.2mm)	22.45 (570.2mm)

NOTE:

1. "D" DIMENSION NOT SHOWN. FOR KEEPER AND TIE BAR GUIDE PLACEMENT. DIMENSION "D" HAS THE SAME ORIGIN AS B AND C DIMENSIONS IN FIG. 1.
2. B AND C DIMENSIONS ARE CONFIGURED TO GIVE SEQUENTIAL AND PROGRESSIVE LOCKING STARTING WITH THE BOTTOM LOCKING POINT.

24 MAXIM® MULTI-POINT & SINGLE POINT LOCKING SYSTEMS

FIG. 6 TIE BAR CHART FOR CONE ROLLER

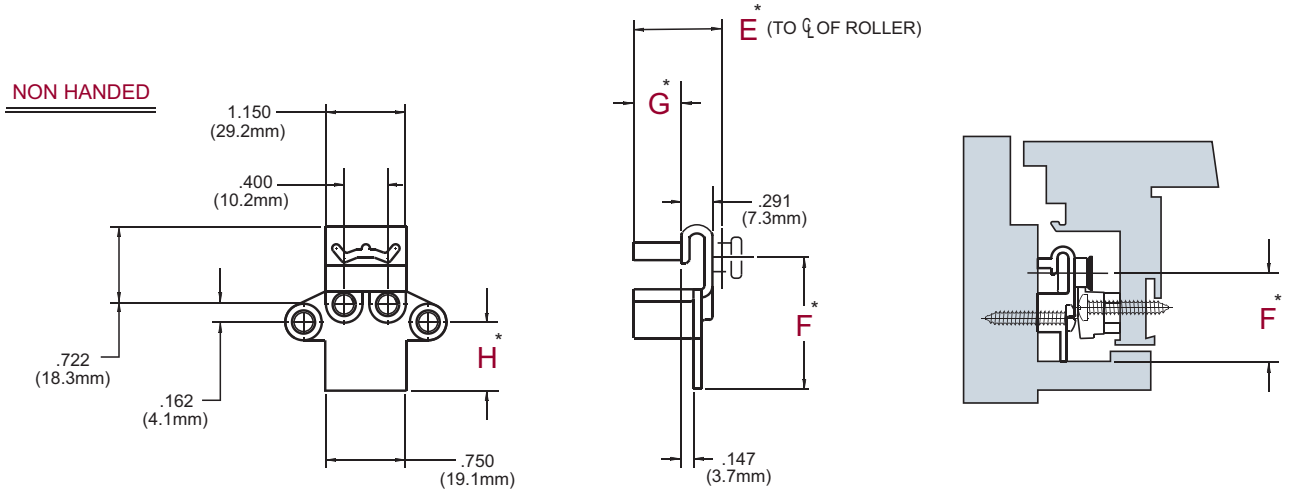


TIE BAR ASSEMBLY							
RECOMMENDED FRAME SIZE (MIN.)	PART NO.			"A" DIM	"B" DIM SEE FIG. 1	"C" DIM SEE FIG. 1	"D" DIM SEE FIG. 1
	2 ROLLERS	3 ROLLERS	4 ROLLERS				
21in (533.4mm)	12005	NA	NA	14.9 (378.5mm)	11.00 (279.4mm)	NA	NA
25in (635.0mm)	12006	NA	NA	18.9 (480.1mm)	15.00 (381.0mm)	NA	NA
29in (736.6mm)	12008	12020	NA	22.9 (581.7mm)	19.00 (482.6mm)	10.00 (254.0mm)	NA
33in (838.2mm)	12009	12021	NA	26.9 (683.3mm)	23.00 (584.2mm)	12.00 (304.8mm)	NA
37in (939.8mm)	12012	12022	NA	30.9 (784.9mm)	27.00 (685.8mm)	14.00 (355.6mm)	NA
41in (1041.4mm)	12013	12023	NA	34.9 (886.5mm)	31.00 (787.4mm)	16.00 (406.4mm)	NA
45in (1143.0mm)	12015	12024	NA	38.9 (988.1mm)	35.00 (889.0mm)	18.00 (457.2mm)	NA
49in (1244.6mm)	12016	12025	NA	42.9 (1089.7mm)	39.00 (990.6mm)	20.00 (508.0mm)	NA
53in (1346.2mm)	12010	12026	NA	46.9 (1191.3mm)	43.00 (1092.2mm)	22.00 (558.8mm)	NA
57in (1447.8mm)	12017	12027	NA	50.9 (1292.9mm)	47.00 (1193.8mm)	24.00 (609.6mm)	NA
61in (1549.4mm)	12018	12028	NA	54.9 (1394.5mm)	51.00 (1295.4mm)	26.00 (660.4mm)	NA
65in (1651.0mm)	12019	12029	NA	58.9 (1496.1mm)	55.00 (1397.0mm)	28.00 (711.2mm)	NA
69in (1752.6mm)	NA	NA	12058	62.9 (1597.6mm)	59.00 (1498.6mm)	39.56 (1004.8mm)	19.78 (502.4mm)
73in (1854.2mm)	NA	NA	12059	66.9 (1699.2mm)	63.00 (1600.2mm)	42.22 (1072.3mm)	21.11 (536.1mm)
77in (1955.8mm)	NA	NA	12060	70.9 (1800.8mm)	67.00 (1701.8mm)	44.89 (1140.2mm)	22.45 (570.2mm)

NOTE:

- "D" DIMENSION NOT SHOWN. FOR KEEPER AND TIE BAR GUIDE PLACEMENT. DIMENSION "D" HAS THE SAME ORIGIN AS B AND C DIMENSIONS IN FIG. 1
- B AND C DIMENSIONS ARE CONFIGURED TO GIVE SEQUENTIAL AND PROGRESSIVE LOCKING STARTING WITH THE BOTTOM LOCKING POINT.

FIG. 7 TIE BAR GUIDE



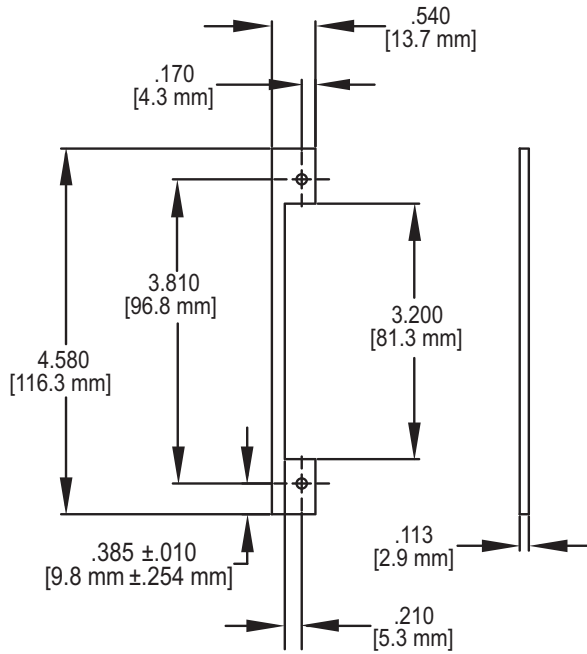
* DIMENSION CAN BE VARIED TO SUIT CUSTOMER PROFILE
CONTACT TRUTH PRODUCT SPECIALIST FOR ASSISTANCE

RECOMMENDED SCREWS:

WOOD/PVC/METAL: 2-#8 PHILLIPS,PAN HEAD,SST
SCREWS (LENGTH AND THREAD TYPE
TO BE DETERMINED BY PROFILES)

PART #	E		G	H	F SEE FIG. 1
	INTERLOCK ROLLER	CONE ROLLER			
40823	0.333	0.400	0.010	0.219	0.765
45145	0.333	0.400	0.010	0.316	0.862
45148	0.333	0.400	0.010	0.398	0.944
40862	0.333	0.400	0.010	0.466	1.012
40726	0.333	0.400	0.010	0.493	1.039
45143	0.333	0.400	0.010	0.619	1.165
40856	0.333	0.400	0.010	0.759	1.305
45134	0.358	0.425	0.035	0.699	1.245
45194	0.363	0.430	0.040	0.375	0.921
45152	0.363	0.430	0.040	0.628	1.174
45157	0.367	0.434	0.044	0.636	1.182
45172	0.383	0.450	0.060	0.369	0.915
40847	0.386	0.453	0.063	0.501	1.047
45123	0.389	0.456	0.066	0.291	0.837
45260	0.411	0.478	0.088	0.278	0.824
45363	0.412	0.479	0.089	0.531	1.077
45128	0.420	0.487	0.097	0.601	1.147
45124	0.431	0.496	0.108	0.589	1.135
45139	0.431	0.498	0.108	0.652	1.198
45224	0.437	0.504	0.114	0.201	0.747
45144	0.422	0.509	0.119	0.617	1.163
45198	0.443	0.510	0.120	0.462	1.008
45151	0.466	0.533	0.143	0.549	1.095
45365	0.467	0.534	0.144	0.473	1.019
45150	0.471	0.538	0.148	0.671	1.217
45300	0.477	0.544	0.154	0.394	0.940
45318	0.482	0.549	0.159	0.276	0.822
45222	0.491	0.558	0.168	0.356	0.902
40635	0.492	0.559	0.169	0.552	1.098
45195	0.493	0.560	0.170	0.471	1.017
45147	0.496	0.563	0.173	0.523	1.069
45130	0.496	0.563	0.173	0.545	1.091
40837	0.496	0.563	0.173	0.646	1.192
40910	0.502	0.569	0.179	0.324	0.870
45137	0.515	0.582	0.192	0.631	1.177
45141	0.526	0.593	0.203	0.582	1.128
45248	0.539	0.606	0.216	0.394	0.940
31374	0.539	0.606	0.216	0.454	1.000
31289	0.552	0.619	0.229	0.556	1.102
45177	0.583	0.650	0.260	0.375	0.921
45140	0.583	0.650	0.260	0.462	1.008
45209	0.597	0.664	0.274	0.527	1.073
41604	0.637	0.704	0.314	0.281	0.827
45329	0.491	0.558	0.168	0.356	0.902

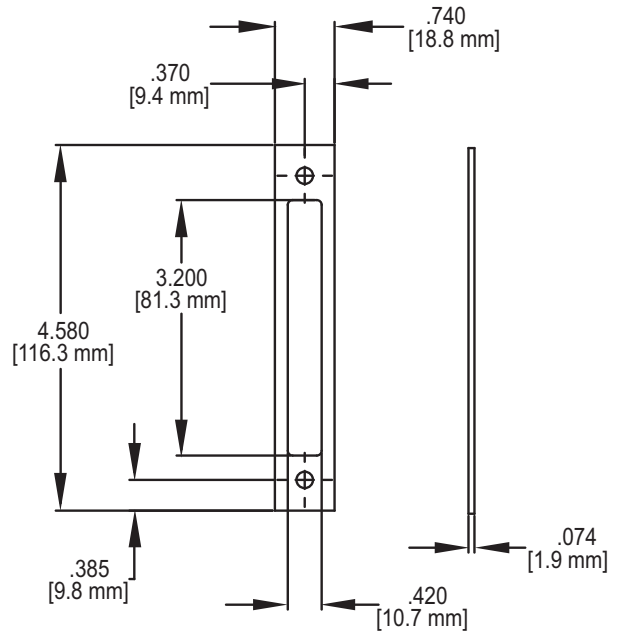
FIG. 8 21600 SUPPORT PLATE



RECOMMENDED SCREWS:

2-P/N 19298 #10-24 X 9/16 PH PAN HEAD
THREAD FORMING MACHINE SCREW

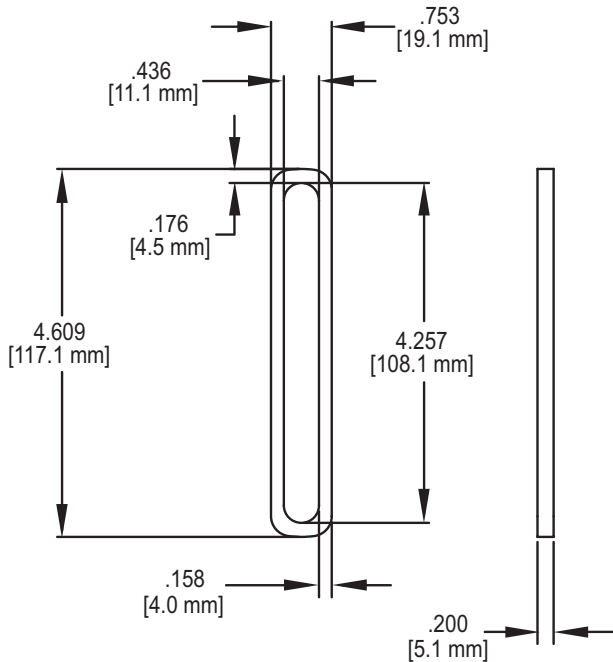
FIG. 9 21710 SUPPORT PLATE



RECOMMENDED SCREWS:

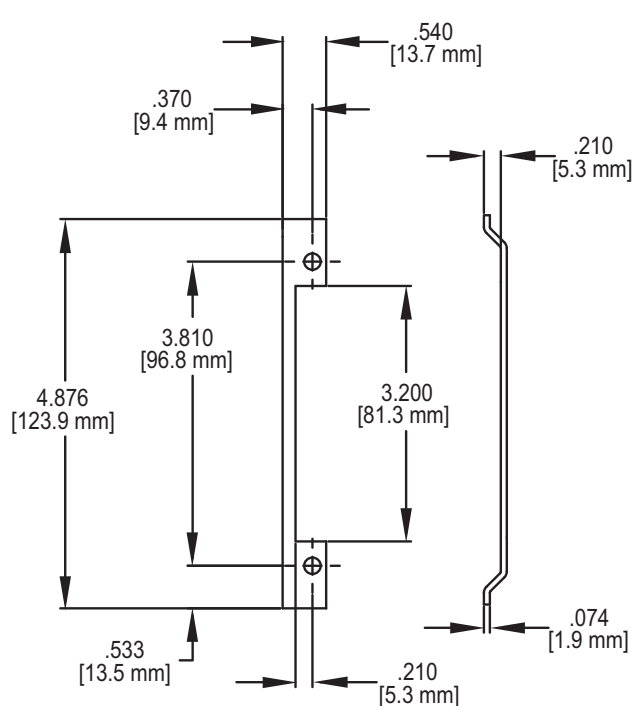
2-P/N 19298 #10-24 X 9/16 PH PAN HEAD
THREAD FORMING MACHINE SCREW

FIG. 10 21709 SPACER



NOTE: FOR USE ON SINGLE WALL PROFILE
OR WHEN ADDED SPACE IS NEEDED
FOR THE BAR OR KEEPER CLEARANCE

FIG. 11 23050 OFFSET SUPPORT PLATE

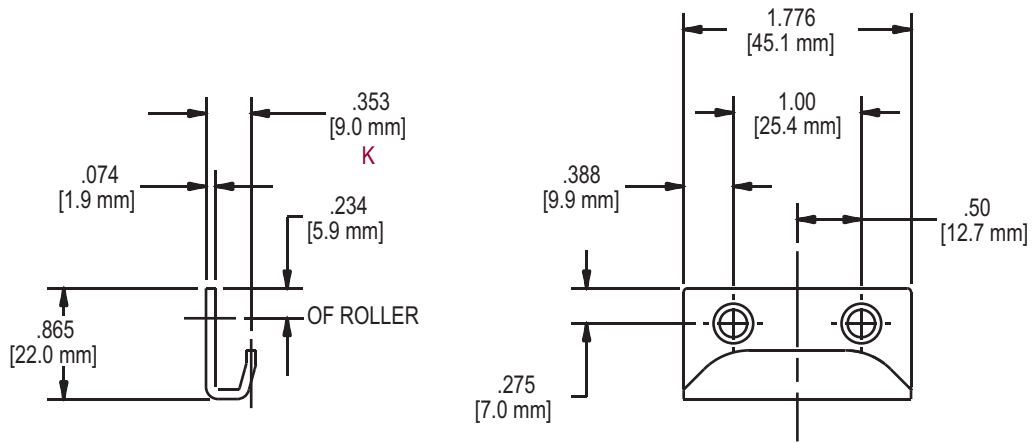


RECOMMENDED SCREWS:

2-P/N 19298 #10-24 X 9/16 PH PAN HEAD
THREAD FORMING MACHINE SCREW

NOTE: FOR USE ON SINGLE WALL PROFILES

FIG. 12 31964 NON-HANDED INTERLOCK KEEPER

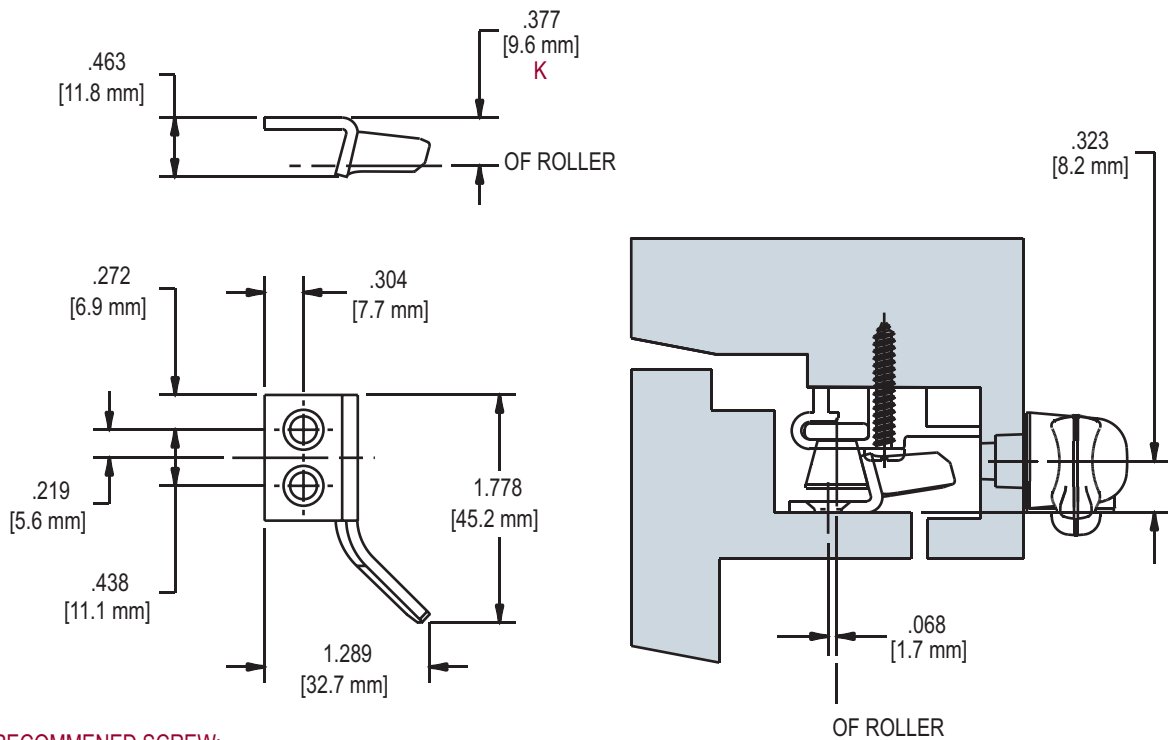


RECOMMENDED SCREWS:

(QYT 2)-#8 PHILLIPS, FLAT HEAD SCREWS (LENGTH AND THREAD TYPE TO BE DETERMINED BY PROFILE)

COMPATIBLE WITH INTERLOCK TIE BARS

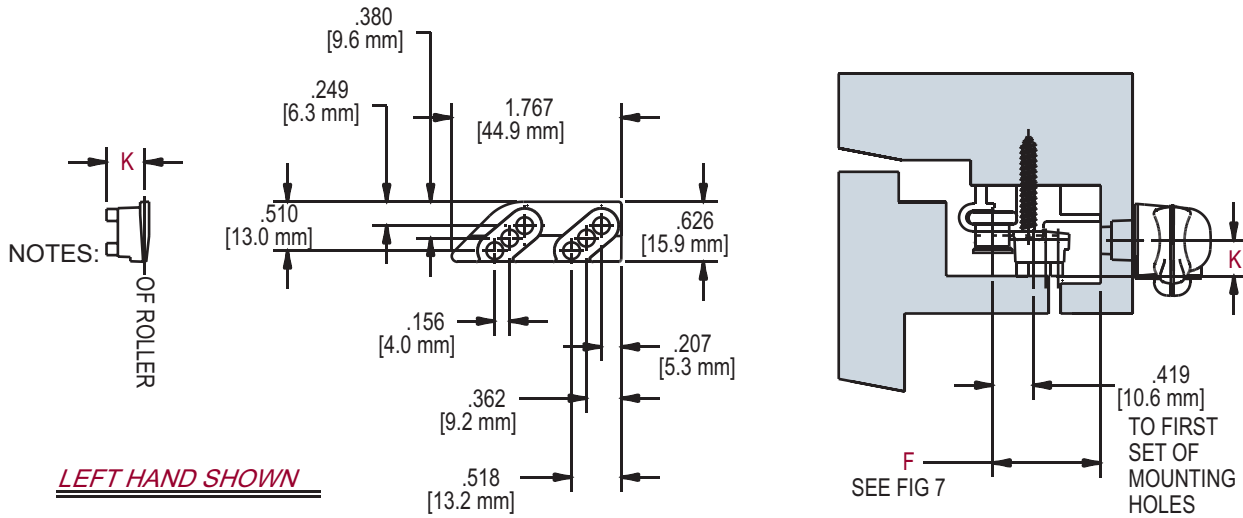
FIG. 13 KEEPER 31218 AND 31217 (FOR CONE ROLLER SYSTEM)



RECOMMENDED SCREW:

WOOD/PVC/METAL: (QYT 2)-#8 PHILLIPS, PAN HEAD, SST SCREWS (LENGTH AND THREAD TYPE TO BE DETERMINED BY PROFILE)

FIG. 14 ADJUSTABLE KEEPER (FOR INTERLOCK ROLLER SYSTEM)



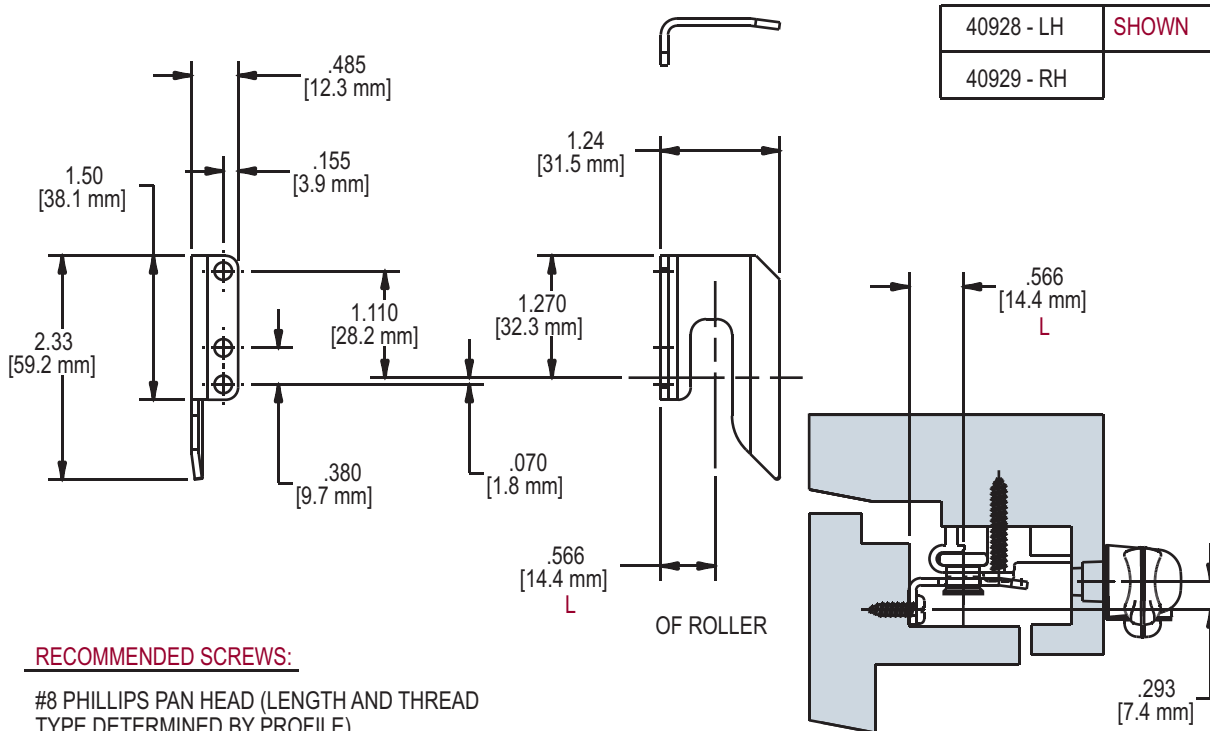
K DIMENSION CAN BE VARIED TO SUIT CUSTOMER PROFILE CONTACT TRUTH PRODUCT SPECIALIST

RECOMMENDED SCREWS:

WOOD/PVC/METAL: (QTY 2) #8 PHILLIPS, PAN HEAD, SST SCREWS (LENGTH AND THREAD TYPE DETERMINED BY PROFILE)

KEEPER NUMBER		K
RH	LH	
40684	40685	0.278
40724	40725	0.331
40773	40774	0.228
40709	40710	0.371

FIG. 15 40928 (LH) AND 40929 (RH) KEEPER USE WITH INTERLOCK TIE BARS
USE WITH INTERLOCK TIE BARS



RECOMMENDED SCREWS:

#8 PHILLIPS PAN HEAD (LENGTH AND THREAD TYPE DETERMINED BY PROFILE)

FIG. 16 31647 (LH) AND 31648 (RH) KEEPER
USE WITH INTERLOCK TIE BARS

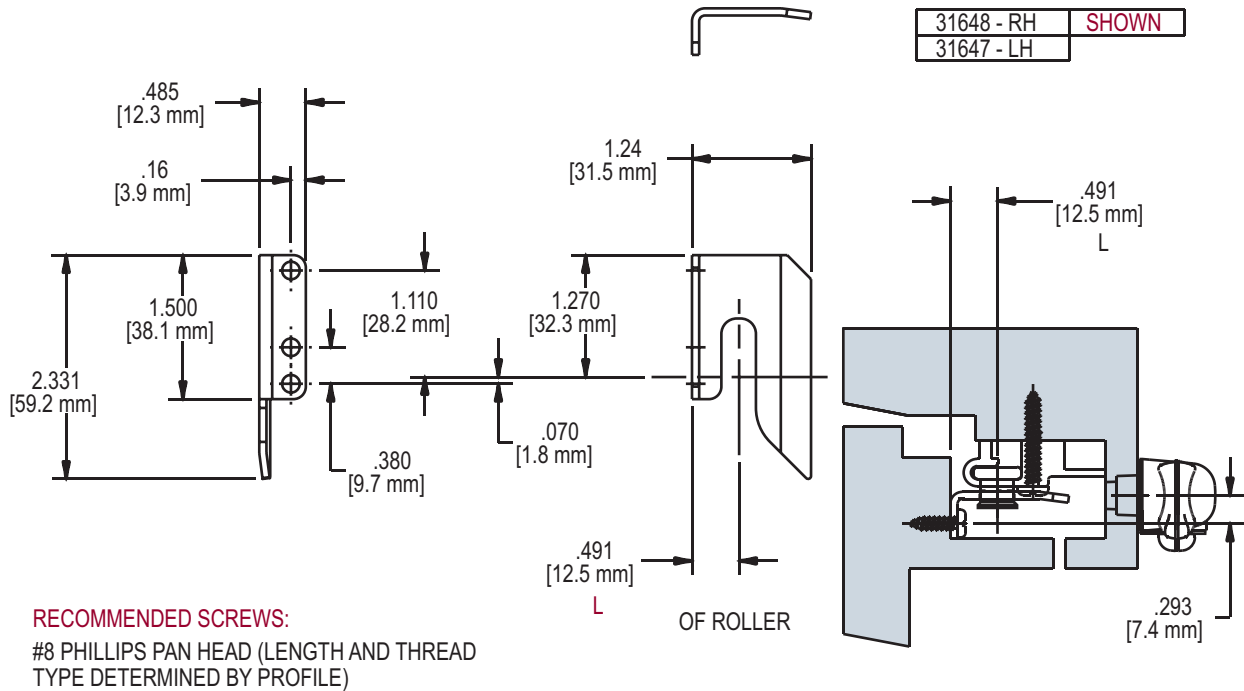


FIG. 17 40970 NON-HANDED KEEPER
USE WITH CONE TIE BARS

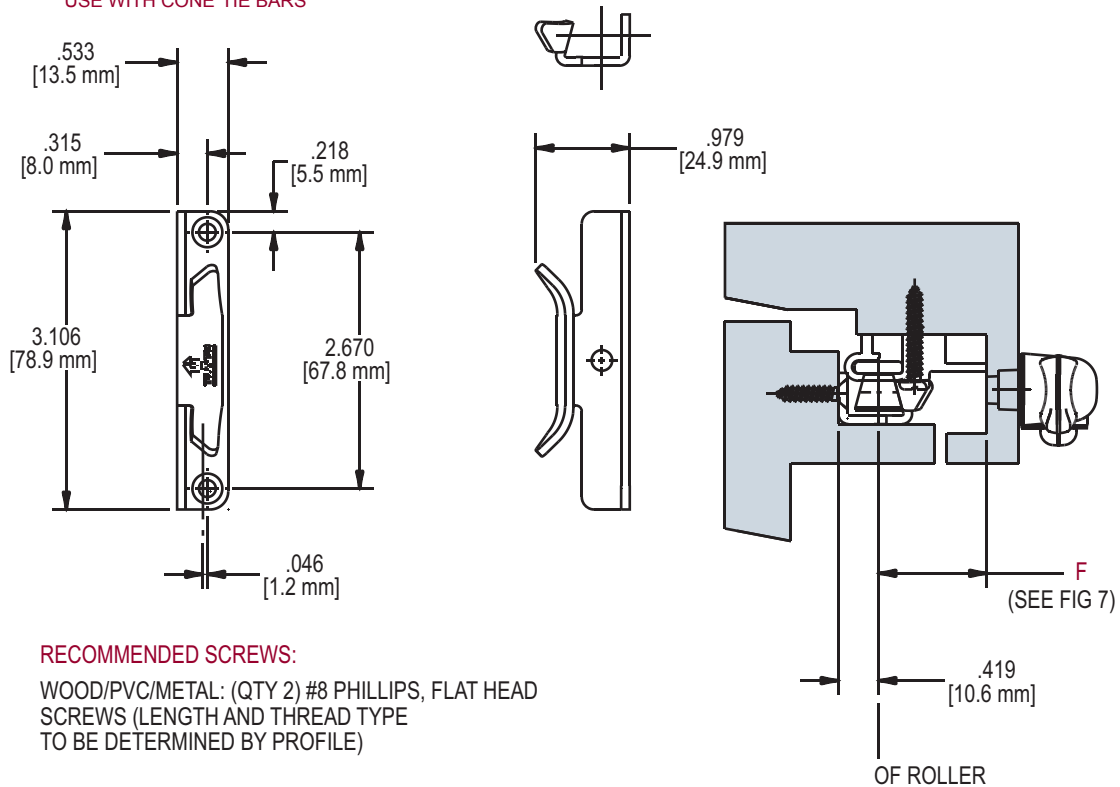
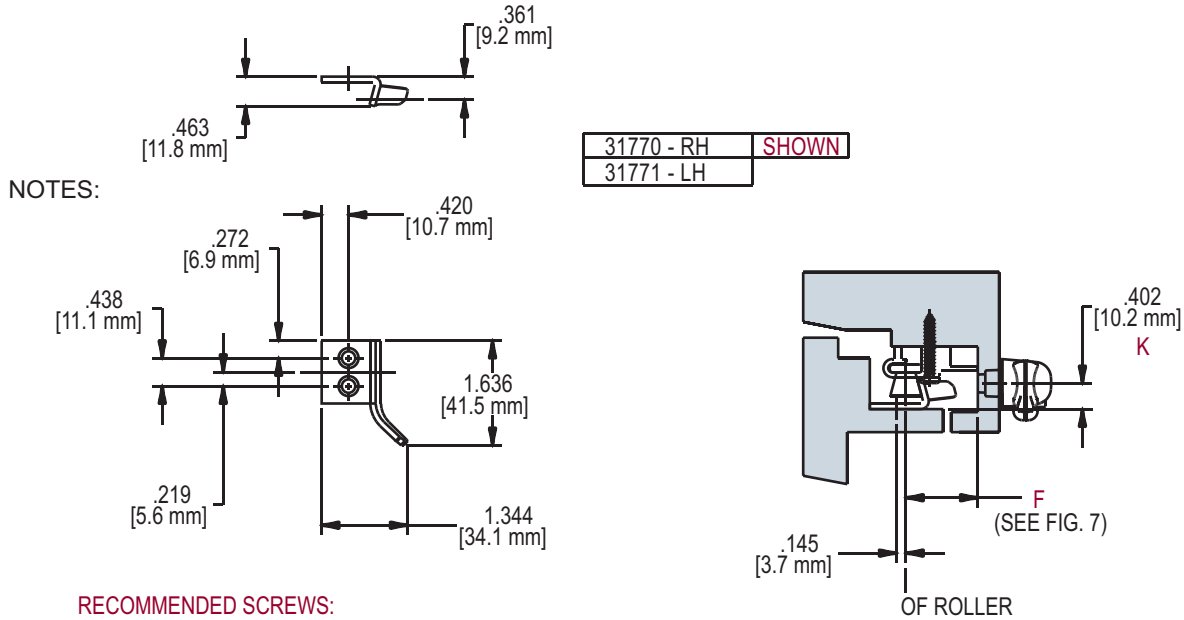


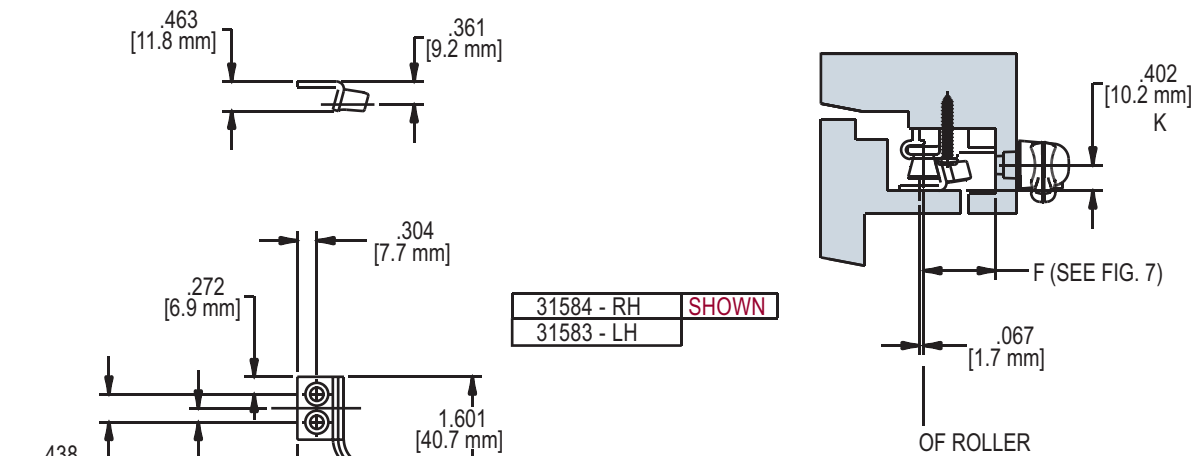
FIG. 18 31770 (RH) AND 31771 (LH) KEEPER
USE WITH CONE TIE BARS



RECOMMENDED SCREWS:

WOOD/PVC/METAL: (QTY 2) #8 PHILLIPS, FLAT HEAD SCREWS (LENGTH AND THREAD TYPE TO BE DETERMINED BY PROFILE)

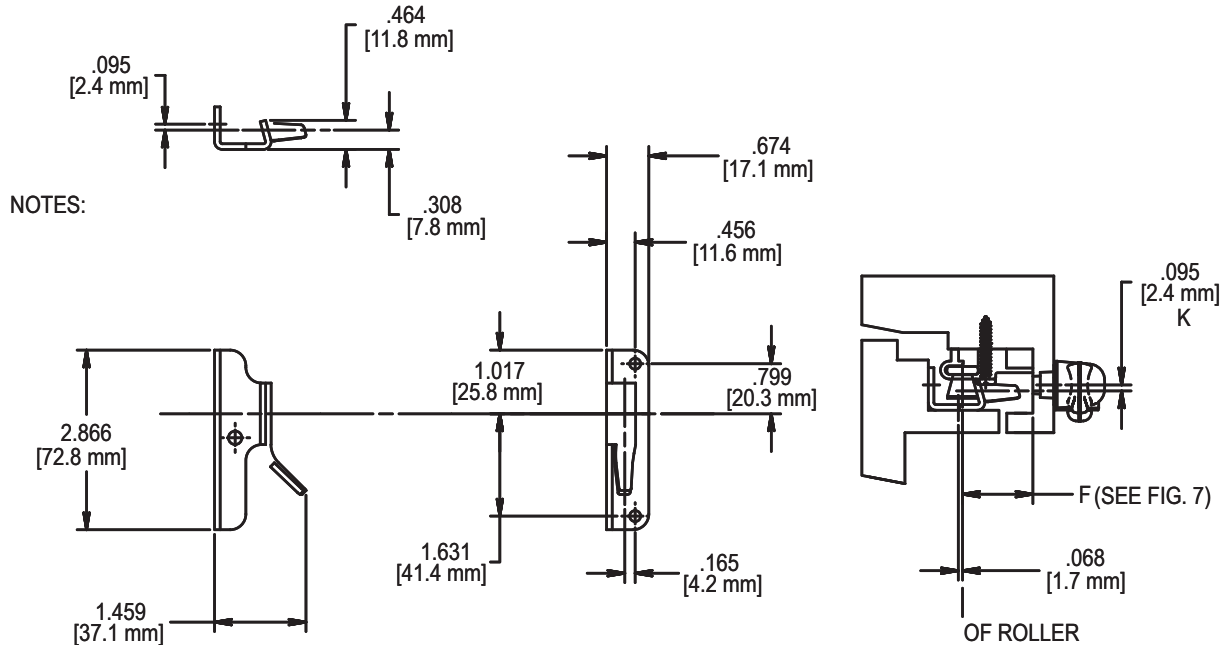
FIG. 19 31583 (RH) AND 31584 (LH) KEEPER
USE WITH CONE TIE BARS



RECOMMENDED SCREWS:

WOOD/PVC/METAL: (QTY 2) #8 PHILLIPS, FLAT HEAD SCREWS (LENGTH AND THREAD TYPE TO BE DETERMINED BY PROFILE)

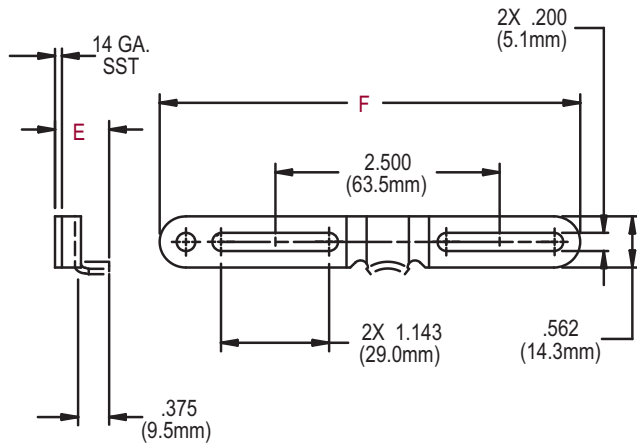
FIG. 20 31414 (RH) AND 31415 (LH) KEEPER (USE WITH CONE TIE BARS)



RECOMMENDED SCREWS:

WOOD/PVC/METAL: (QTY 2) #8 PHILLIPS, PAN HEAD SCREWS (LENGTH AND THREAD TYPE)

FIG. 21 KEEPERS 21087, 21088 AND 21089

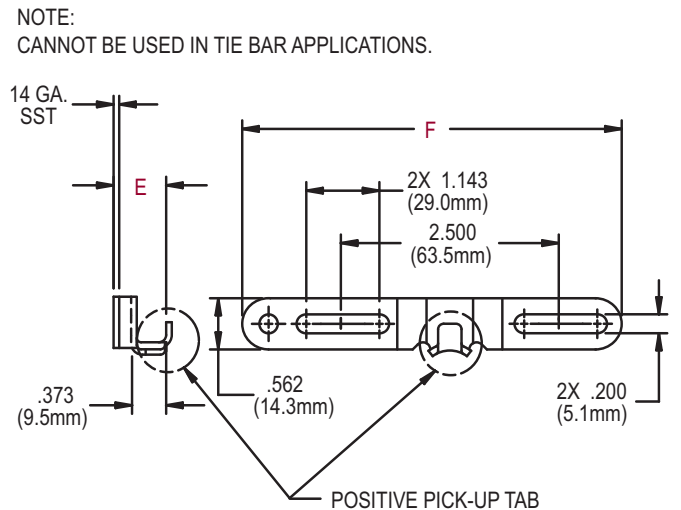


KEEPER NO.	E	F
21087	.375 (9.5mm)	4.735 (120.3mm)
21088	.500 (12.7mm)	4.647 (118.0mm)
21089	.562 (14.3mm)	4.593 (116.7mm)
21325	.688 (17.5mm)	4.647 (118.0mm)

RECOMMENDED SCREWS:

WOOD/PVC/METAL: 2 - #10 PHILLIPS, PAN HEAD, SST SCREWS (LENGTH AND THREAD TYPE DETERMINED BY PROFILE)

FIG. 22 KEEPERS 31376 AND 31384 (WITH POSITIVE PICK-UP TAB)



NOTE:
CANNOT BE USED IN TIE BAR APPLICATIONS.

KEEPER NO.	E	F
31376	.590 (15.0mm)	4.593 (116.7mm)
31384	.373 (9.5mm)	4.735 (120.3mm)

RECOMMENDED SCREWS:

WOOD/PVC/METAL: 2 - #10 PHILLIPS, PAN HEAD, SST SCREWS (LENGTH AND THREAD TYPE DETERMINED BY PROFILE)



700 WEST BRIDGE STREET, OWATONNA, MN 55060 ■ 507.451.5620 800.866.7884 ■ TRUTH.COM
