

Section 9

Services & Assembly Tips

Services

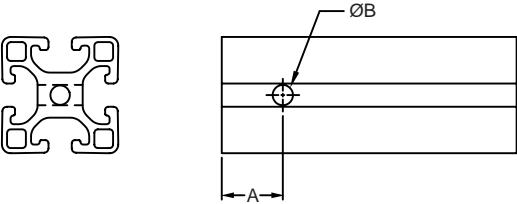
Part #	Description
19-004	Drill & Counterbore for BHCS or SHCS
19-006	Drill & Countersink for FHCS
19-009	Tap 5/16-18
19-511	Drill .277" Access Hole - Except 6" side
19-512	Drill & Tap (10/32", 1/4", 5/16", 3/8")
19-514	Drill & Tap (1/2" or 5/8" up to 1.5" Deep)
19-515	Step Drill for Universal Fastener 1.5" or 1"
19-516	Drill/ Tap 5/16x1.5" for 5/16" Foot
19-517	Drill/ Tap 3/8"x 2" for 3/8" Foot
19-520	Step Bore for Pneum. Univ. Fastener (3/4" x 1/4")
19-525	Drill .277" Access Hole thru 6" side
19-603	Drill/ Tap/ Mill for Roller PA
19-007	Saw Cut for Linear Shaft
19-501	Saw Cut up to 3"x1.5"
19-502	Saw Cut up to 3"x3"
19-503	Saw Cut 6"x1.5"
19-104	Special Miter Cut
19-211	Miter Connection Service
19-605	45° Miter Cut, up to 3x3" profile
19-606	45° Miter Cut, 6"x1.5" profile
19-600	Mill Profile Square 3"x1.5"
19-601	Mill Profile Square 3"x3"
19-602	Mill Profile Square 6"x1.5"
19-026	Panel Packing for Secure Transport
19-029	Panel - Chamfer Corner
19-030	Panel - Notch Corner
19-527	Panel - Thru Hole up to 3/8"
19-200	Special Invoice Required
19-201	Assembly Required
19-202	Assembly Form Follows
19-203	Packaging in Kit Form
19-204	Kit Form Follows
19-205	Special Assembly Documents Enclosed
19-206	Engineering
19-207	On-Site Installation
19-208	Special Packing Slip Required
19-210	Special Machining
19-300	Inspection/Acceptance/Approval

Working with the IPS System

Cutting, Servicing and Assembly

- **Cut profile to length**
 - a. Use a high speed, carbide tooth cold-cut saw; no deburring or facing necessary.
 - b. Or order cut to length by using part number labeled "cut off"
- **Tap extruded face hole and drill wrench clearance hole** for standard fastener; **drill step bore** for universal fastener.
 - a. Drill tooling and locating fixtures available from stock
 - b. Drill press operation only; no machining, welding, finishing

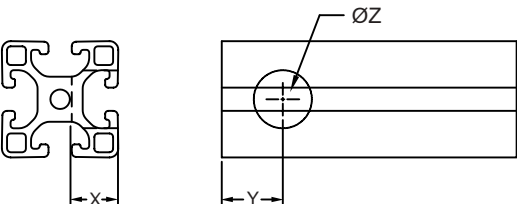
Access Hole



Dimension (in)

Series	A	ØB
1.5"	0.75	0.281
1"	0.50	0.219

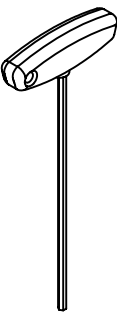
Universal Hole



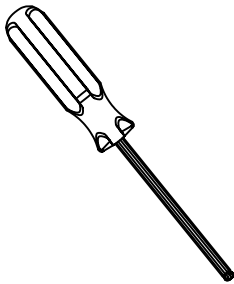
Dimension (in)

Series	X	Y	ØZ
1.5"	0.625	0.813	0.813
1"	0.430	0.500	0.563

Assembly Tools



T-Handle
[40-044, 40-046]



Ball Wrench
[40-047]


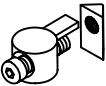




L-Wrench
[40-043, 40-045]

Pre-Assembly Instructions and Hints

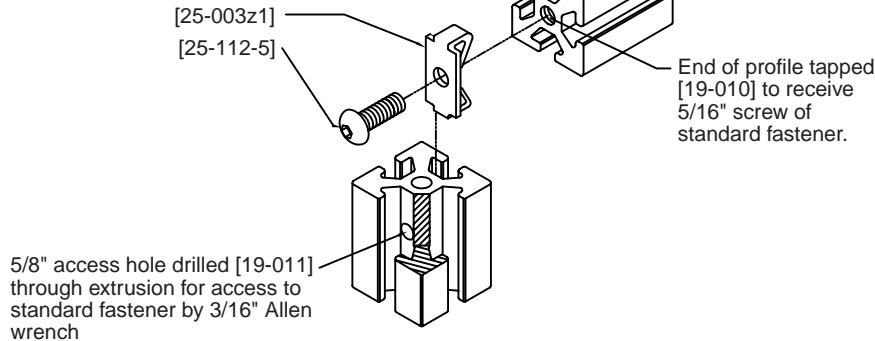
1. Upon receipt of your order, check to see that you have received a complete kit with numbered components. All extrusions are clearly marked with a number designation. Sort all the extrusions according to these designations. If a drawing was supplied, these numbers will correspond with the numbers shown on the drawing and also with those on the bill of materials.
2. Assembly should be performed on a flat surface as this helps insure proper alignment and perpendicularity of the frame.
3. Thread all end fasteners into tapped ends of extrusions but do not tighten the bolts.
4. Pre-assemble all joiner plates, gussets, brackets, wire mesh clamps and anchor fastener assemblies but do not tighten the bolts.
5. If economy T-nuts are being used on joiner plates, gussets, brackets and any accessories which are to be mounted between end fastenings of the main assembly, then these systems of the T-nut should be installed in the proper T-slot at this time.
6. Install all wheels, leveling feet, hinges, handles and end caps after the main frame is constructed.
7. If solid panels are part of the installation, they should be installed in the T-slot after three sides of its frame have been formed. If panel gasket (12-106) is being used, it should be wrapped around the panel, notched at each corner and then slid into the extrusion's "u-shaped" frame.
8. Use a rubber mallet when installing panels and tap panels evenly to insure that they seat to depth within the T-slot.

Fastening Components

Fastener Style	Thread Size	1.5" Series	1" Series
Standard 	1/4		25-022
	5/16	25-003 25-003SS 25-025 (Light) 25-014 (Single End)	
Universal 	1/4		25-023
	5/16	25-004 25-015	
Butt 	1/4		25-017
	5/16	25-016	
Flat Plate 	5/16	25-028	

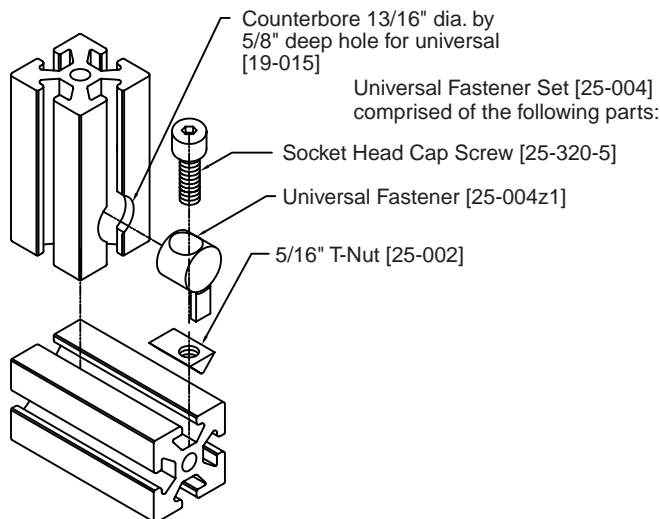
Standard Fasteners

Standard Fastener [25-003]
comprised of parts:



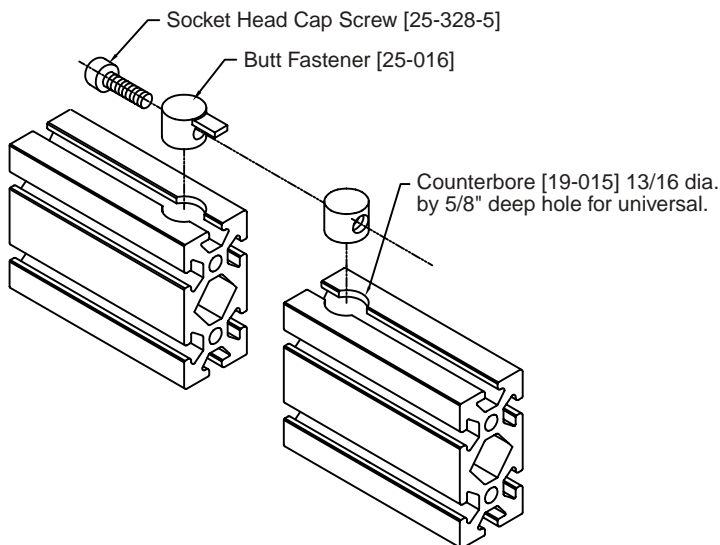
1. Thread 5/16 screw loosely into tapped end of profile
2. Insert standard fastener into T-slot of profile.
3. Align head of screw with access hole.
4. Insert 3/16" Allen wrench into hole and tighten screw.

Universal Fasteners



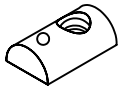
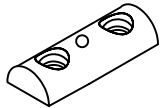


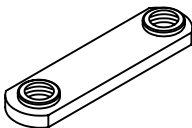

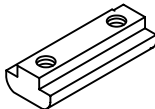
1. Insert T-nut into slot of profile.
2. Insert 5/16 screw into universal fastener from side opposite tab on universal.
3. Insert universal with 5/16 screw in place into counterbored hole of profile.
4. Thread 5/16 screw into T-nut and tighten screw with 3/16 Allen wrench.

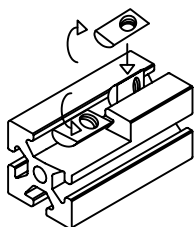
Butt Fasteners



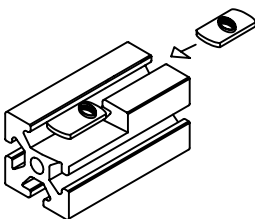
1. Insert 5/16 x 1.75" screw into the butt connector hub with the clear drilled hole from the side opposite the tab and into the butt hub with the tapped hole.
2. Place the butt connector hubs into the 13/16" diameter by 5/8" deep holes in each end of the butting extrusions.
3. Tighten with 3/16 Allen wrench or T-bar.

T-Nuts

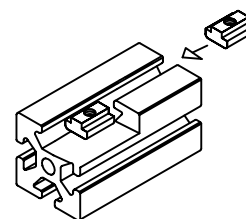
T-Nut Style	Thread Size	1.5" Series	1" Series
Standard Roll-in 	#10-32	25-009	25-030
	1/4	25-001	25-031
	5/16	25-002 25-002SS	
Standard Roll-in (Double) 	1/4	25-040 1.5" centers	25-032 1" centers
	5/16	25-041 1.5" centers	
		25-042 1.0" centers	
Slide-in Economy 	#10-32	20-088	25-033
	1/4	20-083	25-034
	5/16	20-082 20-082SS	
Slide-in Economy Offset 	#8-32	25-045	25-048
	#10-32		25-035
	1/4	20-193	25-036
	5/16	20-182	
Slide-in Economy (Double) 	1/4	25-045 1" centers	25-037 , 25-038 0.6" centers
	5/16	25-046 1.5" centers	
		25-047 0.88" centers	
Slide-in Heavy Duty 	1/4	25-050	
	5/16	25-051	
Slide-in Heavy Duty (Double) 	1/4	25-052 1" centers	
	5/16	25-053 1.5" centers	



Roll-in

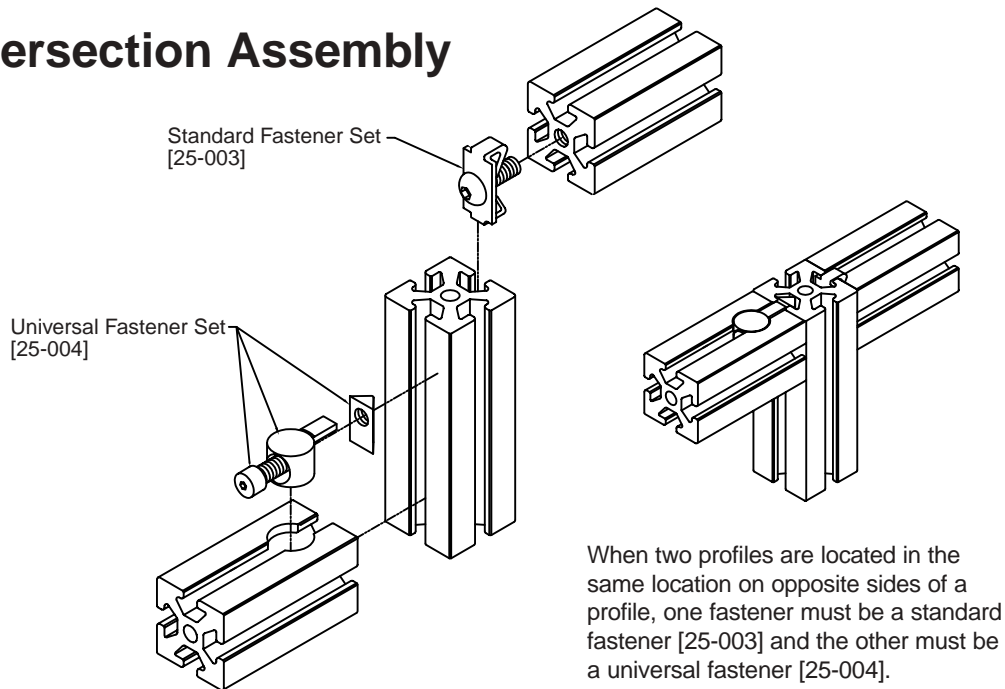


Slide-in Economy

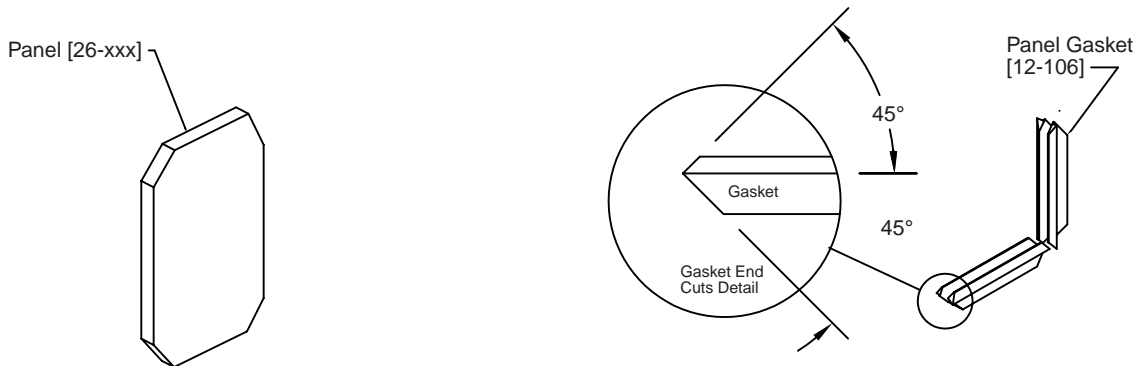


Slide-in Heavy Duty

Profile Intersection Assembly

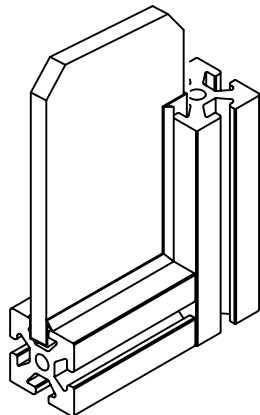


Panel and Gasket Cutting and Installation



Cut chamfers at panel corners that are adjacent to standard fasteners. Chamfer should be at 45° angle (approx.) and should start at 9/16" from corner.

Measure the length of each side of the panel and cut the gasket to those lengths. Then cut each end of the gasket as shown above. Two 45° angle cuts will insure proper fit. Then slide the cut gasketing onto the side of the panel.



With the gasketing mounted on the panel, insert the panel into the slot of the extrusion. By loosening the standard fasteners that hold the extrusions together, the panel will be allowed to slide more freely into place. Gently tapping the extrusion into place and tightening the extrusions back together will insure a tight fitting panel.

