

Alterations for Aluminum Extrusions - Overview

MISUMI Aluminum Extrusion products can be utilized for structure building with highly enhanced design flexibility when available alteration options are applied. Some alterations are not applicable depending on extrusion types and sizes. Check for the available alterations on each product page price lists.

Type	Alterations	Page	Alteration Codes	Example	Contents
End Tapping	End Tapping (Center Hole)	P681	LTP / RTP / TPW LHP / RHP / HPW		Adds tapped holes on extrusion ends. Blind Joints which require this alteration - Screw Joints P662 - Simple Joints P667
	End Tapping (4 Side Holes)	P692	LSP / RSP / SPW		Adds tapped holes on extrusion corner ends.
Cutting Method Change	High Precision Cut	P682	SC		Applies High Precision Cut with an overall length tolerance of L±0.2 (Standard=L±0.5). * Only applicable to L≤1500
	45-Degree Cut	P682	L_T45 / R_T45		Cuts with 45-degree angle.
Drill Wrench Hole	Wrench Hole in Fixed Position	P683	LWP / RWP		Wrench access hole(s) for Blind Joints are drilled. The hole location will be aligned with the mating extrusion's tapped hole location. Blind Joints which require this alteration - Screw Joints P662 - Single Joints P667 - Tapping Joints P661
	Extrusion End Caps Hole Position Change for Extrusion End Cap Thickness	P684	FL / FR		Offsets the wrench access hole for the thickness of Extrusion End Cap (3mm). The extrusion end cap will be flat with the adjacent extrusion surface.
	Wrench Hole in Specified Position	P685	AH / BH / AV / BV		Adds a wrench hole in a desired position from the left end. Use for Blind Jointing in beam sections, etc.
Counterboring	Counterbores in Specified Position	P687	Z6 / XA100		Adds a counterbored hole in a desired position from the left end. Can be used for connecting extrusions or installing tables, etc.
Blind Joints Dedicated Holes	D Hole	P688	LDH / RDH		Adds required holes for Single Joint connections. (Single Joints P669)
	S Hole	P689	LSH		Adds required holes for Pre-Assembly, Insertion Double Joint connections. (Pre-Assembly Insertion Double Joints P671)
	M Hole	P690	LMH		Adds required holes for Post-Assembly Insertion Double Joints, Center Joint connections. (Post-Assembly Insertion Double Joints P665)
	L Hole	P691	JLP		Adds required holes for Parallel Joint connections. (Parallel Joints P673)

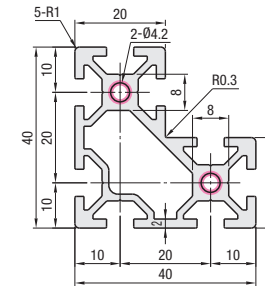
Printed in Red: Added Spec.

Type	Alterations	Page	Alteration Codes	Example	Contents
Special Extrusions End Plates Alterations for Mounting	GFS Series End Tapping	P692	LTS / RTS / TSW		Adds tapped holes on extrusion ends. Blind Joints which require this alteration - Screw Joints P662 - Simple Joints P667
	HFSR End Tapping	P692	LTS / RTS / TSW		Necessary alteration to use Ends Protection Plates for HFSR series on P544, 586, 624 .
Chamfering	End Face C Chamfering	See Below	CW		Adds C Chamfering on extrusion ends.
Labeling	Labeling	See Below	ZZZ		Adds a sticker with catalog No. etc. on the aluminum extrusions. Although number of characters are limited, customer's own serial number or unit number can be labeled.

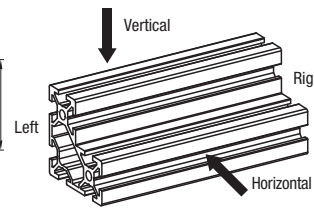
Standard of Extrusion Position and Indications

For some hole alterations, specifying of "Which end (L or R) to apply the alterations" and "Which direction (horizontal or vertical) to apply the alterations" will be required. Using our standard specifying method for orientation (as the product drawings facing you on product pages), then L/R and H/V are determined as shown below.

Ex.: HFS5-404020



(Cross-Section View on Product Page)

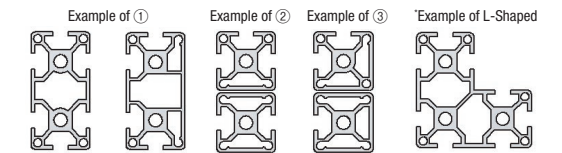


Please determine the L / R and H / V with the product drawings facing you, on each product page.

Standard of Extrusion Position

Placing method of the extrusion, which is a basis to determine right and left is shown as follows.

- On the vertical length
- Flat side down
- One flat side down and another flat side right



*When the extrusion is on the vertical length and also has a flat side, ① has the priority.

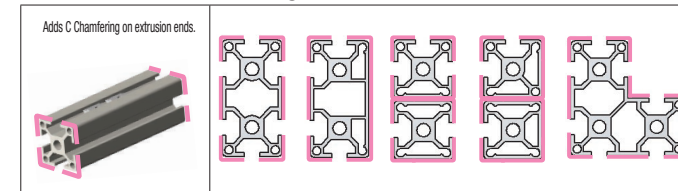
LR (Left and Right of Extrusions):

Place extrusions properly, then determine the right and left. Since most extrusion cross sections are symmetrical and can be used in any orientation. However, please specify the L/R parameters in your orders for administrative purposes. Extrusions ① with different alterations applied on left and right ends, and ② with non-symmetrical cross sections are not reversible therefore the L/R specifications will become critically important.

HVP (Horizontal / Vertical / Cross):

Specify the hole alterations with the extrusion properly oriented, and according to the connection method with the mating extrusion.

End Face C Chamfering



Alteration	Code	Spec.	Price Adder
End Face C Chamfering	CW	Adds C Chamfering on Both Extrusion Ends. (Thread Chamfering C0.2~0.3)	

Ordering Example: HFS6 - 3030 - 500 - CW

Days to Ship [Configure Online](#)

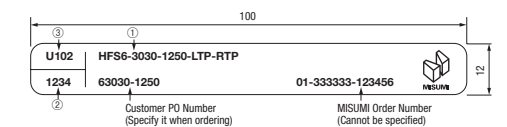
Labeling on Aluminum Extrusions

Adds a sticker with catalog No. etc. on the aluminum extrusion (Free of Charge).

When placing an order, please add:
(1) a serial number of four digits beginning with -ZZZ
(2) Specify a unit number of 3 digits or less beginning with -U.

(Ex.) HFS6-3030-1250-LTP-RTP-ZZZ1234-U102

① Part Number ② Serial Number ③ Unit Number



Detailed Specs

Please specify the serial number by 1 digit or more. Make ③ blank if the unit number is not specified. If Part Number exceeds 41 digits, "... " follows from the 42nd digit. If Customer PO Number exceeds 21 digits, "... " follows from the 22nd digit.