

# EGCL End Grain Connector



Suitable for solid timber: EGCL is a two-piece system that provides a high-strength, hidden connection between timber members where the joist header or post is fastened into the end-grain of a carried joist.

As the connector is concealed within the timbers, this method provides 30 minutes fire resistance.

EGCL can be surface mounted or recess fitted.

Ideal for light duty structures.

## Benefits:

- Can be pre-installed off-site for rapid assembly
- Provides a discrete connection where aesthetics are the priority
- Light weight aluminium for ease of handling

## Material:

- Joist plate: 8 mm aluminium
- Header plate: 8 mm aluminium

## Suitable on:

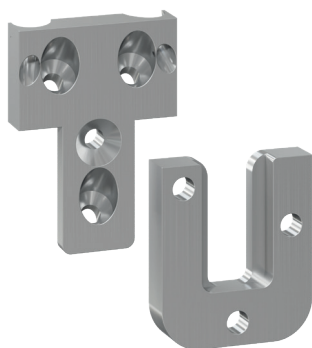
- Solid timber

## For use with:

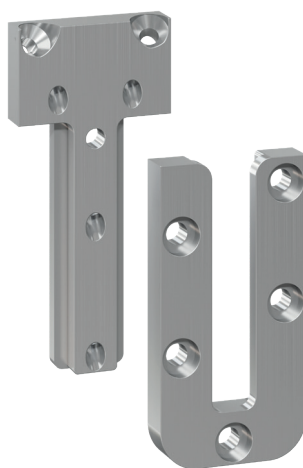
- Timber to timber connections as part of a light duty structure

## Installation:

- Mounting connectors EGCL is simplified by the use of a jig available on stock
- The slot can be routed by using a Ø16 mm cutter with Ø30 mm washer



EGCL60

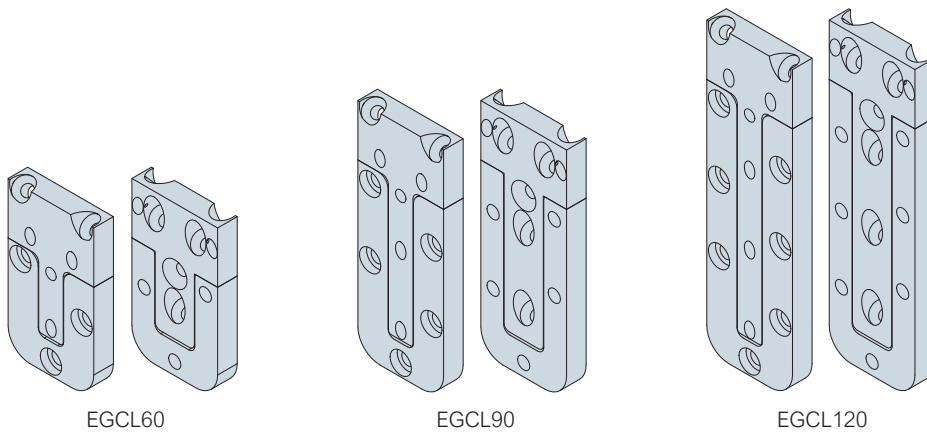


EGCL90



EGCL120

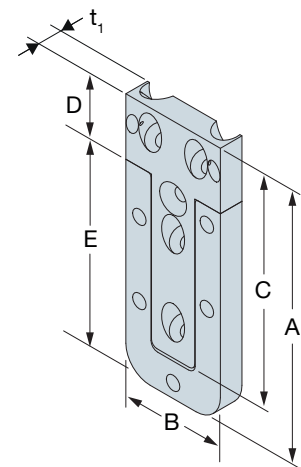
Technical Support Contact your local Simpson Strong-Tie technical support team at any time during the design stage. We can advise the optimal density and thickness combination for the project.



## Product Dimensions

References	Product dimensions [mm]						Number of holes		
							U-part Ø5	T-part Ø4	
	A	B	C	D	E	$t_1=t_2$	90°	45°	90°
EGCL60	61	35	48	21	40	8	3	3 + 2	1
EGCL90	89	35	76	21	68	8	5	4 + 2	1
EGCL120	117	35	104	21	96	8	7	5 + 2	1

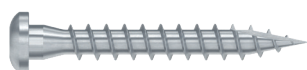
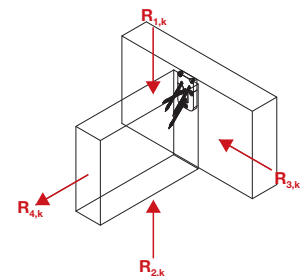
Except for the two optional uplift screws, fill all screw holes with screws.  
To prevent rotation and to absorb uplifting, lateral and axial loads, two optional fully threaded screws are inserted from the joist through the connector into the header.



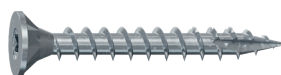
## Product Characteristic Capacities – Timber Beam to Timber Beam

References	Fasteners qty		Characteristic capacities - Timber C24 [kN]						
	Header / post	Joist	Min Joist dimension [mm]		$R_{1,k}$	$R_{2,k}$	$R_{3,k}$	$R_{4,k}$	
			Min Width	Min Height					
EGCL60	3 CSA 5,0x40	4 (6) TTUFS 4,0x60	40	100	5,3	3,1	1,5	2,3	
EGCL90	5	5 (7)	40	120	5,9	3,6	1,8	3,1	
EGCL120	7	6 (8)	40	140	7,5	4,2	2,2	3,9	

The specified values apply to the minimum dimensions of the joist.  
For larger cross-sections and different screws, observe the specifications of the respective ETA.  
If the force is only in the F1 direction, the two optional screws from above can be left out.  
For further product capacities, please visit [strongtie.eu](http://strongtie.eu)

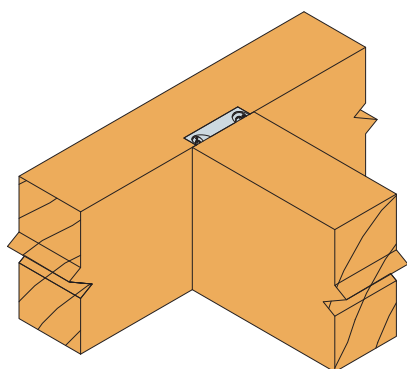


CSA 5.0x40  
To fasten EGCL into the header / post

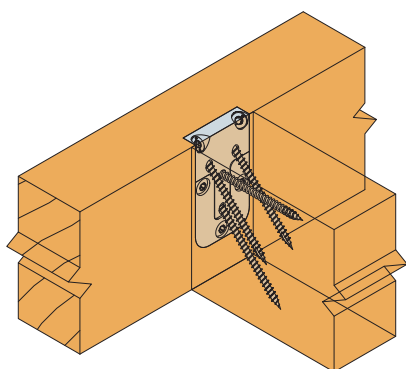


TTUFS 5.0x40  
To fasten EGCL into the carried joist

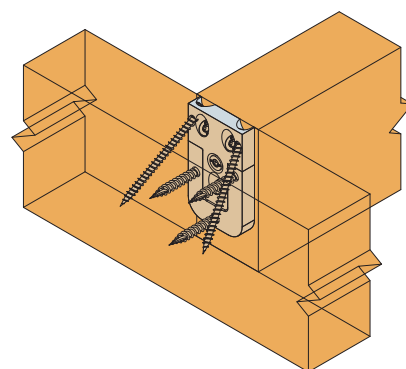
## Concealed connection



Recessed installation

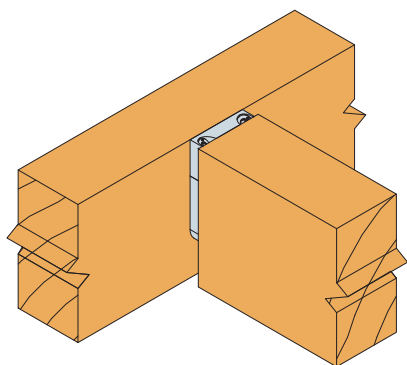


Recessed installation  
fasteners into carried joist

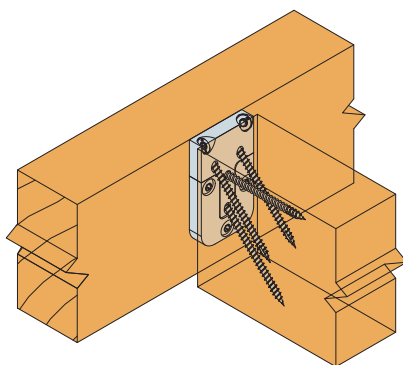


Recessed installation  
fasteners into header

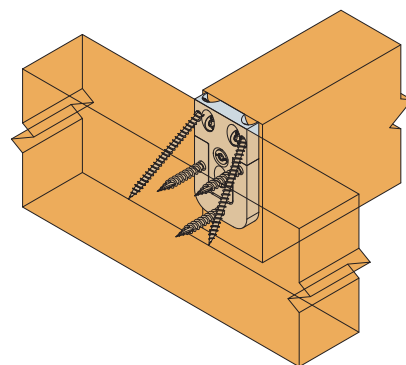
## Standard connection



Surface installation



Surface installation  
fasteners into carried joist



Surface installation  
fasteners into header





EGCL solid timber post-to-beam connection (surface mounted)



EGCL solid timber joist-to-beam connection recessed fit (routed)  
showing fastener configuration

EGCL is intended for smaller timber sizes. For medium duty applications and timber sizes, please refer to the EGCM product range.