

CLICKSYS Roof Mount Technical Datasheet

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CLICKSYS Beam Connection Hardware

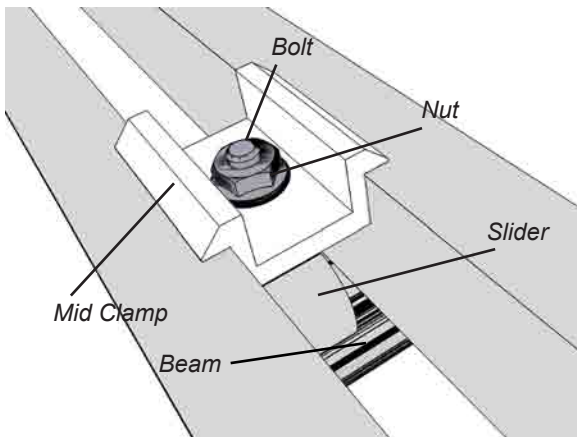
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CLICKSYS Beam

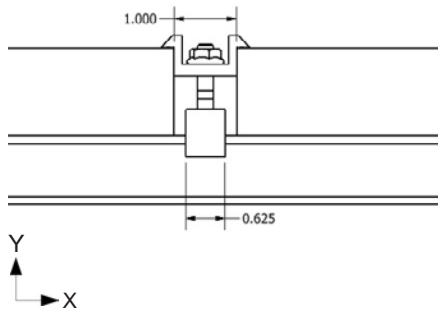
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CLICKSYS Module Connection Hardware

CLICKSYS Slider with Mid Clamp
Part No. 02027C, 02028C, 02029C, 02030C



- **Slider and Mid Clamp Material:** One of the following mill finished extruded aluminum alloys: 6005-T5, 6105-T5, 6061-T6
Ultimate tensile: 38ksi, Yield: 35 ksi
- **Slider Weight:** 0.026 lbs (12g), **Mid Clamp Weight:** 0.050 lbs (23g)
- Allowable and design loads are valid when components are assembled with CLICKSYS beams according to authorized UNIRAC documents
- Sliders are compatible with CLICKSYS beams
- Assemble with one ¼-20 ASTM F593 bolt and one ¼-20 ASTM F594 serrated flange nut
- Use anti-seize and tighten to 10 ft-lbs of torque
- Resistance factors and safety factors are determined according to part 1 section 9 of the 2005 Aluminum Design Manual

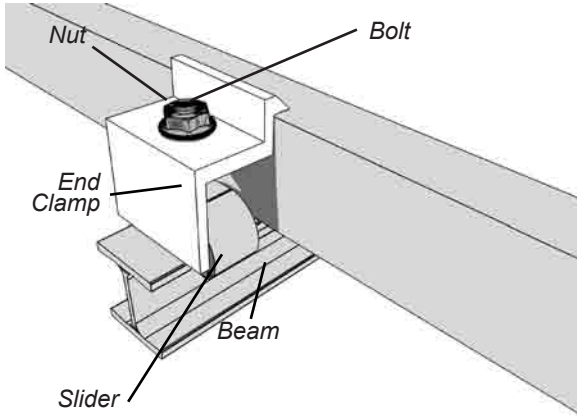


Dimensions specified in inches unless noted

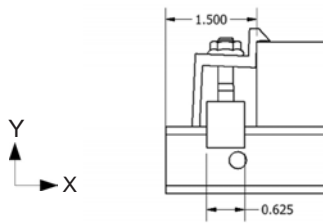
Applied Load Direction	Average Ultimate lbs (N)	Allowable Load lbs (N)	Safety Factor, FS	Design Load lbs (N)	Resistance Factor, Φ
Sliding, X±	1194 (5311)	490 (2180)	2.44	741 (3296)	0.620
Tension, Y+	1503 (6686)	677 (3011)	2.22	1024 (4555)	0.682
Transverse, Z±	2080 (9252)	915 (4070)	2.27	1383 (6152)	0.665

CLICKSYS Module Connection Hardware

CLICKSYS Slider with End Clamp Part No. 02001C through 02006C, 02009C, 02010C



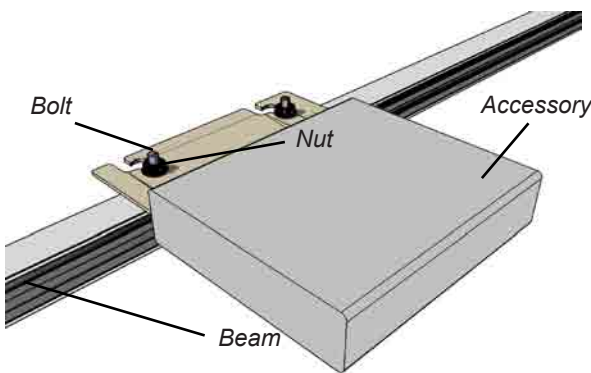
- **Slider and End Clamp Material:** One of the following mill finished extruded aluminum alloys: 6005-T5, 6105-T5, 6061-T6
Ultimate tensile: 38 ksi, Yield: 35 ksi
- **Slider Weight:** 0.026 lbs (12g), end clamp weight varies based on height: ~0.058 lbs (26g)
- Allowable and design loads are valid when components are assembled with CLICKSYS beams according to authorized UNIRAC documents
- Sliders are compatible with CLICKSYS beams
- Assemble with one ¼-20 ASTM F593 bolt and one ¼-20 ASTM F594 serrated flange nut
- Use anti-seize and tighten to 10 ft-lbs of torque
- Resistance factors and safety factors are determined according to part 1 section 9 of the 2005 Aluminum Design Manual
- Modules must be installed at least 1.5 in from either end of a beam



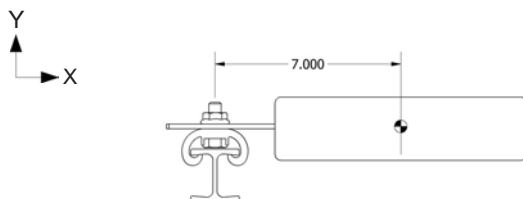
Dimensions specified in inches unless noted

Applied Load Direction	Average Ultimate lbs (N)	Allowable Load lbs (N)	Safety Factor, FS	Design Loads lbs (N)	Resistance Factor, Φ
Sliding, X±	283 (1259)	104 (463)	2.72	157 (698)	0.555
Tension, Y+	332 (1477)	88 (391)	3.77	133 (592)	0.401
Transverse, Z±	1367 (6081)	533 (2371)	2.56	806 (3585)	0.590

CLICKSYS Accessory Mount Part No. 08010M



- **Slider Material:** One of the following mill finished extruded aluminum alloys: 6005-T5, 6105-T5, 6061-T6
Ultimate tensile: 38 ksi, Yield: 35 ksi
- **Slider Weight:** 0.026 lbs (12g)
- Allowable and design loads are valid when components are assembled with CLICKSYS beams according to authorized UNIRAC documents
- CLICKSYS Accessory Mounts are compatible with CLICKSYS beams
- Use two Accessory Mounts per accessory
- Assemble each pair of clamps with the following stainless steel hardware: two ¼-20 set screws, two ¼-20 heavy hex jam nuts, and two ¼-20 F594 serrated flange nuts
- Use anti-seize and tighten to 5-10 ft-lbs of torque
- Resistance factors and safety factors are determined according to calculations and UNIRAC testing

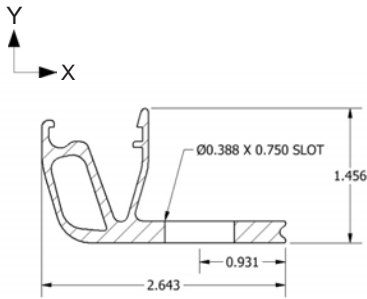
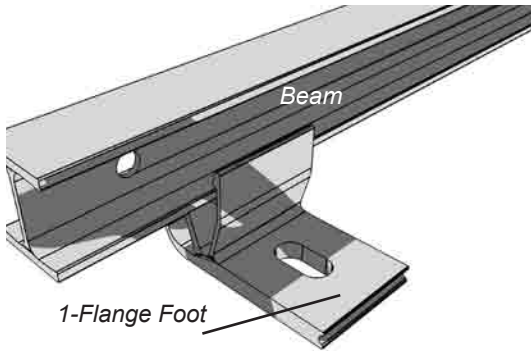


Dimensions specified in inches unless noted

Maximum distance of accessory center of gravity from beam center in (mm)	Maximum weight of accessory lbs (kg)
7 (178)	32 (14.5)

CLICKSYS Beam Connection Hardware

CLICKSYS 1- Flange Foot Part No. 04011M

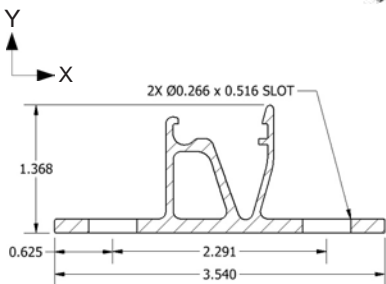
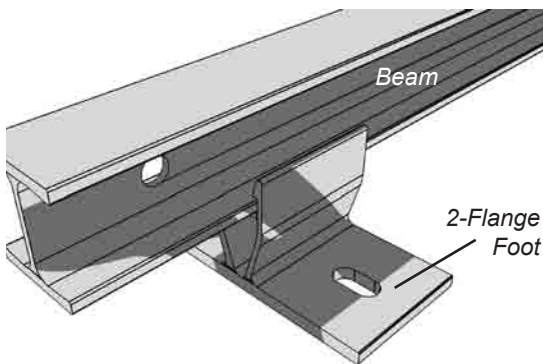


Dimensions specified in inches unless noted

- **1-Flange Foot Material:** One of the following mill finished extruded aluminum alloys: 6005-T5, 6105-T5, 6061-T6
Ultimate tensile: 38 ksi, Yield: 35 ksi
- **1-Flange Foot Weight:** 0.101 lbs (46 g)
- Allowable and design loads are valid when components are assembled with CLICKSYS beams according to authorized UNIRAC documents
- 1-Flange feet are compatible with CLICKSYS beams
- Resistance factors and safety factors are determined according to part 1 section 9 of the 2005 Aluminum Design Manual
- Design and allowable loads are for the beam to foot connection
- **Be sure to check load limits for roof attachments and standoffs**

Applied Load Direction	Average Ultimate lbs (N)	Allowable Load lbs (N)	Safety Factor, FS	Design Load lbs (N)	Resistance Factor, Φ
Tension, Y+	1388 (5952)	591 (2629)	2.26	894 (3977)	0.668
Compression, Y-	2931 (13038)	1288 (5729)	2.28	1948 (8665)	0.664
Transverse, X-, downhill	635 (2825)	313 (1392)	2.03	473 (2104)	0.745
Transverse, X+, uphill	42 (187)	20 (89)	2.15	30 (133)	0.705
Sliding, Z±	(see seismic splice)				

CLICKSYS 2 - Flange Foot Part No. 04002M, 04003M



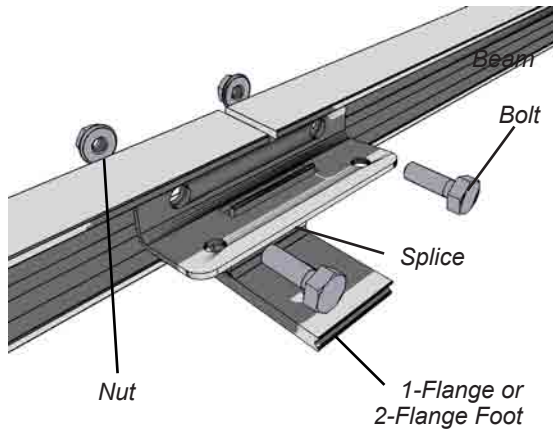
Dimensions specified in inches unless noted

- **2-Flange Foot Material:** One of the following mill finished extruded aluminum alloys: 6005-T5, 6105-T5, 6061-T6
Ultimate tensile: 38 ksi, Yield: 35 ksi
- **2-Flange Foot Weight:** 0.103 lbs (47 g)
- Allowable and design loads are valid when components are assembled with CLICKSYS beams according to authorized UNIRAC documents
- 2-Flange Feet are compatible with CLICKSYS beams
- Resistance factors and safety factors are determined according to part 1 section 9 of the 2005 Aluminum Design Manual
- Design and allowable loads are for the beam to foot connection
- **Be sure to check load limits for roof attachments and standoffs**

Applied Load Direction	Average Ultimate lbs (N)	Allowable Load lbs (N)	Safety Factor, FS	Design Load lbs (N)	Resistance Factor, Φ
Tension, Y+	1931 (8590)	864 (3843)	2.23	1307 (5814)	0.677
Compression, Y-	3788 (16850)	1706 (7589)	2.22	2581 (11481)	0.681
Transverse, X-, downhill	635 (2825)	313 (1392)	2.03	473 (2104)	0.745
Transverse, X+, uphill	42 (187)	20 (89)	2.15	30 (133)	0.705
Sliding, Z±	(see seismic splice)				

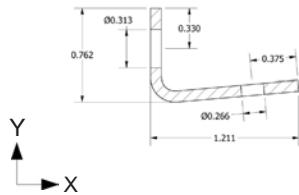
CLICKSYS Beam Connection Hardware

CLICKSYS Seismic Splice Part No. 03020M, 03021M



- **Seismic Splice Material:** Aluminum 5052-H32
Ultimate tensile: 31 ksi, Yield: 23 ksi
- **Seismic Splice Weight:** 0.053 lbs (24 g)
- Allowable and design loads are valid when components are assembled according to authorized UNIRAC documents
- Seismic Splices are compatible with CLICKSYS beams when used with 1-Flange or 2-Flange feet
- Resistance factors and safety factors are determined according to part 1 section 9 of the 2005 Aluminum Design Manual

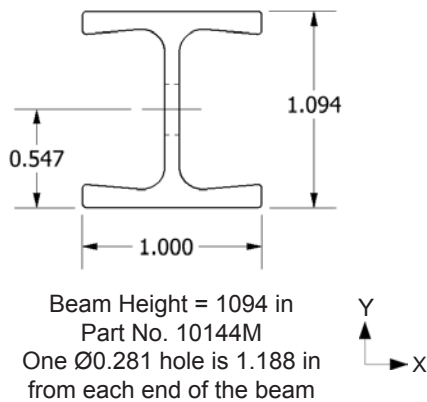
Applied Load Direction	Average Ultimate lbs (N)	Allowable Load lbs (N)	Safety Factor, FS	Design Load lbs (N)	Resistance Factor, Φ
Sliding, \pm	1428 (6352)	620 (2758)	2.30	938 (4172)	0.657



Dimensions specified in inches unless noted

CLICKSYS Beam

MATERIAL: One of the following extruded aluminum alloys: 6005-T5, 6105-T5, or 6061-T6, Mill Finish		
Properties	Units	Beam Height (in)
		1.094
Approximate Weight (per linear ft)	plf	0.356
Total Cross Sectional Area	in ²	0.3037
Section Modulus (X-Axis)	in ³	0.1101
Section Modulus (Y-Axis)	in ³	0.0390
Moment of Inertia (X-Axis)	in ⁴	0.0602
Moment of Inertia (Y-Axis)	in ⁴	0.0195
Radius of Gyration (X-Axis)	in	0.4453
Radius of Gyration (Y-Axis)	in	0.2536



Dimensions specified in inches unless noted