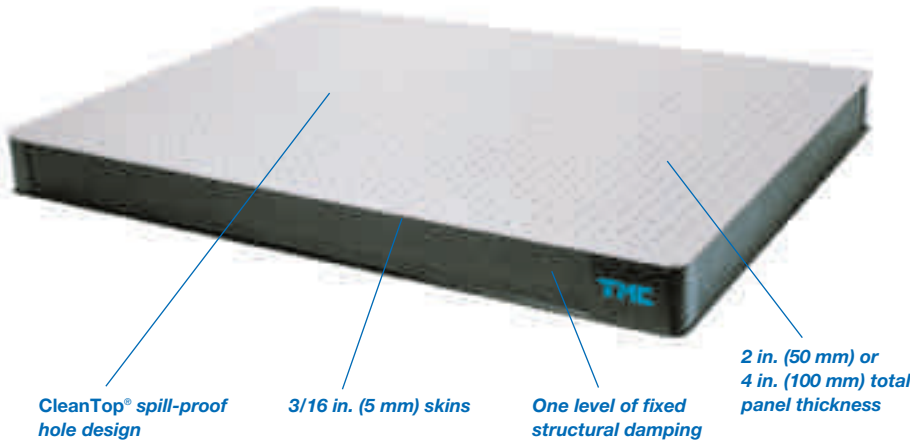


77 SERIES & 78 SERIES

CleanTop® Breadboards

2 and 4 in. Thick (50,100 mm)



GENERAL SPECIFICATIONS

- Core:** Steel honeycomb, closed-cell, 0.010 in. (0.2 mm) thick foil
- Core shear modulus:** 275,000 psi (19,300 kg/cm²)
- Core cell size:** <0.5 in.² (3 cm²)
- Core density:** 13.3 lb/ft³ (230 kg/m³)
- Flatness:** ± 0.005 in. (0.13 mm)
- Top skin:** 430 series ferromagnetic stainless steel
- Sidewalls:** Damped, formed steel channel, vinyl covered
- Tapped holes:** Backed by 1 in. (25 mm) long CleanTop nylon cups

TMC's 77 and 78 Series CleanTop® Breadboards provide the ultimate in rigidity and damping for smaller tops. Available in both 2 and 4 inch thicknesses (50, 100 mm), these tops include the same patented CleanTop

spill-proof hole technology and small cell, high-density steel honeycomb core as our largest tops.

These tops can be readily designed to meet custom requirements including custom mounting hole patterns,

through-holes, special shapes and custom materials.

TMC's 77 and 78 Series CleanTop Breadboards are recommended for virtually all demanding breadboard applications.

How to Order

1. Choose prefix from chart indicating desired model.
2. Choose basic part number for the required size from size chart.
3. Assign suffix indicating hole pattern required.

Model Number Example

Prefix	Basic	Suffix
77 or 78	— 219	— 02R
Series	Size	Hole Pattern
CleanTop®	24" x 48" x 4"	1/4-20 holes on 1" centers
3/16" skins		Radius corners

Prefix Chart

Damping Level	Prefix
Standard dry damping	77
Standard dry damping	78

Suffix Chart

Hole Patterns/Laser Ports

Suffix	Hole Pattern-Threads	Double Density	Laser Port
00R	No Holes	no	no
01R	1" centers - 1/4-20	no	yes
02R	1" centers - 1/4-20	no	no
11R	25 mm centers - M6	no	yes
12R	25 mm centers - M6	no	no
01DR	1" staggered centers - 1/4-20	yes	yes
02DR	1" staggered centers - 1/4-20	yes	no
11DR	25 mm staggered centers - M6	yes	yes
12DR	25 mm staggered centers - M6	yes	no

Size Chart

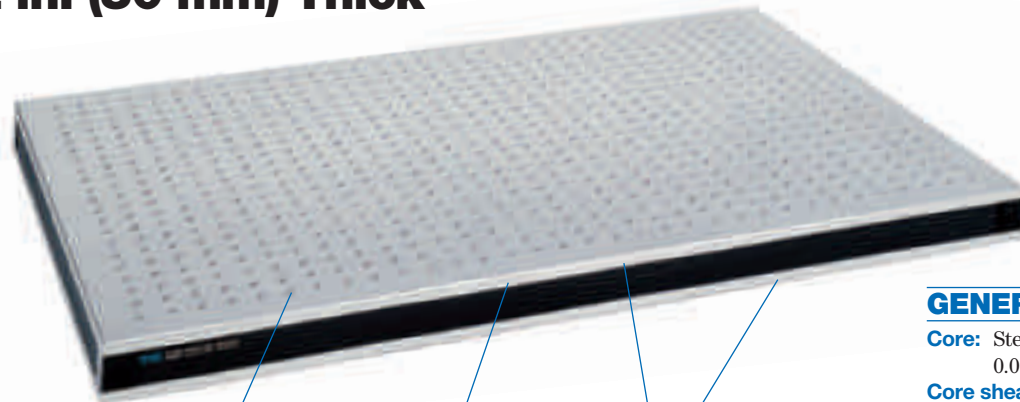
Surface Dimensions			77 Series (Thick)		78 Series (Thick)	
in.	ft	m	2 in. (50 mm)	4 in. (100 mm)	2 in. (50 mm)	4 in. (100 mm)
12 x 12	1 x 1	0.3 x 0.3	77 - 105	77 - 205	78 - 105	78 - 205
12 x 24	1 x 2	0.3 x 0.6	77 - 107	77 - 207	78 - 107	78 - 207
12 x 36	1 x 3	0.3 x 0.9	77 - 108	77 - 208	78 - 108	78 - 208
12 x 48	1 x 4	0.3 x 1.2	77 - 109	77 - 209	78 - 109	78 - 209
12 x 72	1 x 6	0.3 x 1.8	77 - 110	77 - 210	78 - 110	78 - 210
20 x 30		0.5 x 0.75	77 - 111	77 - 211	78 - 111	78 - 211
20 x 40		0.5 x 1.0	77 - 112	77 - 212	78 - 112	78 - 212
24 x 24	2 x 2	0.6 x 0.6	77 - 113	77 - 213	78 - 113	78 - 213
24 x 36	2 x 3	0.6 x 0.9	77 - 115	77 - 215	78 - 115	78 - 215
24 x 48	2 x 4	0.6 x 1.2	77 - 119	77 - 219	78 - 119	78 - 219
24 x 60	2 x 5	0.6 x 1.5	77 - 121	77 - 221	78 - 121	78 - 221
24 x 72	2 x 6	0.6 x 1.8	77 - 123	77 - 223	78 - 123	78 - 223
24 x 96	2 x 8	0.6 x 2.4	77 - 124	77 - 224	78 - 124	78 - 224
30 x 30		0.75 x 0.75	77 - 125	77 - 225	78 - 125	78 - 225
30 x 36		0.75 x 0.9	77 - 127	77 - 227	78 - 127	78 - 227
30 x 40		0.75 x 1.0	77 - 129	77 - 229	78 - 129	78 - 229
30 x 48		0.75 x 1.2	77 - 131	77 - 231	78 - 131	78 - 231
30 x 60		0.75 x 1.5	77 - 132	77 - 232	78 - 132	78 - 232
30 x 72		0.75 x 1.8	77 - 191	77 - 291	78 - 191	78 - 291
30 x 96		0.75 x 2.4	77 - 192	77 - 292	78 - 192	78 - 292
36 x 36	3 x 3	0.9 x 0.9	77 - 133	77 - 233	78 - 133	78 - 233
36 x 48	3 x 4	0.9 x 1.2	77 - 135	77 - 235	78 - 135	78 - 235
36 x 60	3 x 5	0.9 x 1.5	77 - 136	77 - 236	78 - 136	78 - 236
36 x 72	3 x 6	0.9 x 1.8	77 - 139	77 - 239	78 - 139	78 - 239
36 x 96	3 x 8	0.9 x 2.4	77 - 140	77 - 240	78 - 140	78 - 240
40 x 40		1.0 x 1.0	77 - 141	77 - 241	78 - 141	78 - 241
40 x 60		1.0 x 1.5	77 - 143	77 - 243	78 - 143	78 - 243
40 x 80		1.0 x 2.0	77 - 144	77 - 244	78 - 144	78 - 244
48 x 48	4 x 4	1.2 x 1.2	77 - 147	77 - 247	78 - 147	78 - 247
48 x 60	4 x 5	1.2 x 1.5	77 - 149	77 - 249	78 - 149	78 - 249
48 x 72	4 x 6	1.2 x 1.8	77 - 151	77 - 251	78 - 151	78 - 251
48 x 96	4 x 8	1.2 x 2.4	77 - 155	77 - 255	78 - 155	78 - 255
Weight Factor (WF) (approx.);			0.135 lb/in. ²	0.195 lb/in. ²	0.135 lb/in. ²	0.195 lb/in. ²

75 SERIES

Lightweight Breadboard

2 in. (50 mm) Thick

U.S. Patent No. 5,558,920



CleanTop®
spill-proof holes

0.075 in. (2 mm) top skin
with formed, tapped holes

Ferromagnetic
stainless steel top
and bottom

Another in a long line of TMC innovations, our 75 Series Breadboards minimize both weight and cost. A patented manufacturing technique allows us to form countersunk, tapped holes in a thin top skin of stainless steel. The holes are not drilled or punched, but fabricated in a way that effectively “thickens” the skin in a small ring around the threads. No inserts are used and the tapped holes are three threads deep.

These tops have relatively high levels of rigidity, as they utilize our standard steel core. However, with their thin top and bottom skins, they cannot have the rigidity and damping properties of our

78 and 77 CleanTop® Breadboards. They are ideal when light loads are anticipated and low weight and/or cost are the most crucial factors.

The weight savings – 50% less than our 78 Series Breadboards – is derived only from the lighter gauge skins.

This lightweight design is available from stock in the sizes listed below. A full range of sizes and materials is available on a custom basis. Contact TMC for pricing and delivery for custom configurations.

GENERAL SPECIFICATIONS

Core: Steel honeycomb, closed-cell, 0.010 in. (0.2 mm) thick foil

Core shear modulus: 275,000 psi (19,300 kg/cm²)

Core cell size: <0.5 in.² (3 cm²)

Core density: 13.3 lb/ft³ (230 kg/m³)

Flatness: ± 0.005 in. (0.13 mm)

Top skin: 430 series stainless steel, 0.075 in. (2 mm) thick

Bottom skin: 400 series stainless steel, 0.075 in. (2 mm) thick

Sidewalls: High-pressure laminate

Tapped holes: Backed by individual, CleanTop cups; 3 threads

Features

- Ultra-lightweight design – weighs less than 9 lbs/ft² (44 kg/m²).
- Stainless steel top and bottom skins.
- Aluminum and carbon steel versions available.
- Very low prices, even in low quantity.
- Formed holes are countersunk and tapped three threads.
- Formed holes in top skin add to rigidity.
- CleanTop individual cups under each hole make the core spill proof.

Ordering Chart — Model Number

Surface Dimensions		Model Number		Weight	
in.	mm	1/4–20 holes on 1 in. centers	M6 holes on 25 mm centers	lbs	kg
19 x 23	450 x 600	75SSC – 103 – 02	75SSC – 103 – 12	31	14
19 x 47	450 x 1200	75SSC – 104 – 02	75SSC – 104 – 12	62	28
23 x 23	600 x 600	75SSC – 113 – 02	75SSC – 113 – 12	37	17
23 x 35	600 x 900	75SSC – 115 – 02	75SSC – 115 – 12	56	25
23 x 47	600 x 1200	75SSC – 119 – 02	75SSC – 119 – 12	74	34
35 x 47	900 x 1200	75SSC – 135 – 02	75SSC – 135 – 12	111	50

Note: Only the most common, stocked sizes are listed. A full range of sizes is available. Contact TMC for details.