

## Optical Breadboard Overview

Thorlabs' honeycomb breadboards are made with the same advanced manufacturing and design methods used for our optical tabletops. We also offer solid aluminum breadboards, which provide a convenient and cost-effective platform for prototyping and optical experiments. Our imperial and metric breadboards range in size from 4" x 6" to 6' x 4' and 100 mm x 150 mm to 2000 mm x 1250 mm, respectively.

### Available Options for Thorlabs' Honeycomb Breadboards

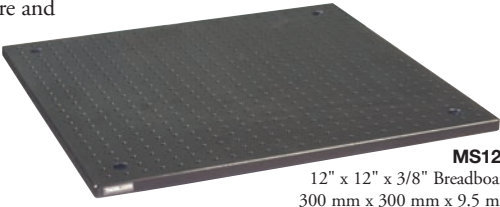
OPTIONAL FEATURES	ULTRALIGHT™ SERIES (Pages 4 - 5)	PERFORMANCE™ SERIES (Pages 6 - 7)	PERFORMANCEPLUS™ SERIES (Pages 8 - 9)
Brushed Stainless Steel Top Plate	N/A	Standard	Standard
Black Finish on Top Plate	Standard	✓	✓
Brushed Steel Finish on Top Plate	N/A	✓	✓
Double-Density Hole Pattern	✓	✓	✓
Blank Top Plate	✓	✓	✓
Access Wells for Standoff Posts	✓	✓	✓
Breadboard Levelers	✓	✓	✓
Nonmagnetic Top and Bottom Plates	Standard	✓	✓
Through Holes/Cutouts	✓	✓	✓
Custom Hole Patterns	✓	✓	✓
Aluminum Honeycomb Core	Standard	✓	✓

### Feature Comparison of Honeycomb Breadboards

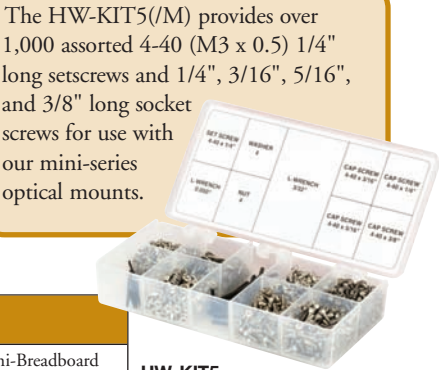
OPTIONAL FEATURES	ULTRALIGHT™ SERIES (Pages 4 - 5)	PERFORMANCE™ SERIES (Pages 6 - 7)	PERFORMANCEPLUS™ SERIES (Pages 8 - 9)
Thickness	1" or 2.2" (25 mm or 55 mm)	2.4" or 4.3" (60 mm or 110 mm)	2.4" or 4.3" (60 mm or 110 mm)
Flatness	±0.15 mm	±0.10 mm	±0.10 mm
Skin	Aluminum	Magnetic Stainless Steel	Magnetic Stainless Steel
Honeycomb Core	Aluminum	Plated Steel	Plated Steel
Sealed Holes	No	No	Yes
Weight per Unit Area	4.7 lb/ft² or 6.0 lb/ft² (24 kg/m² or 30 kg/m²)	19 lb/ft² or 23 lb/ft² (98 kg/m² or 114 kg/m²)	23 lb/ft² or 28 lb/ft² (114 kg/m² or 137 kg/m²)

## Mini-Series Breadboard

Our miniature breadboard features 4-40 (M3 x 0.5) tapped holes on 1/2" (12.5 mm) centers. These solid-aluminum breadboards are complimented by a full range of optomechanical hardware and accessories. These mounting components can be found on pages 74 - 86.



4-40 (M3 x 0.5)  
Tapped Holes on  
1/2" (12.5 mm) Centers



The HW-KIT5(M) provides over 1,000 assorted 4-40 (M3 x 0.5) 1/4" long setscrews and 1/4", 3/16", 5/16", and 3/8" long socket screws for use with our mini-series optical mounts.

### Mini-Breadboard and Hardware Kit

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
MS12B	MS12B/M	\$ 257.00	£ 185.04	€ 223.59	¥ 2,048.29	12" x 12" High-Density Mini-Breadboard
HW-KIT5	HW-KIT5/M	\$ 92.20	£ 66.38	€ 80.21	¥ 734.83	Hardware Kit for Mini-Series

HW-KIT5  
Mini-Series Hardware Kit