

# IR Blocker 40™ and IR Blocker 40 Plus™



## Applications

- Digital Information Displays (DID)
- Outdoor / Drive-Thru Menu Boards
- Ruggedized displays

## Key Features

- Passive NIR reflection for low solar heat gain
- Excellent viewability / and neutral CRI
- Reduces mechanical cooling cost
- Heat treatable per ASTM C 1048-97b (Kind HS)
- Outstanding reliability and durability
- Low field maintenance cost
- Custom sizes and thicknesses available

### Available Sizes

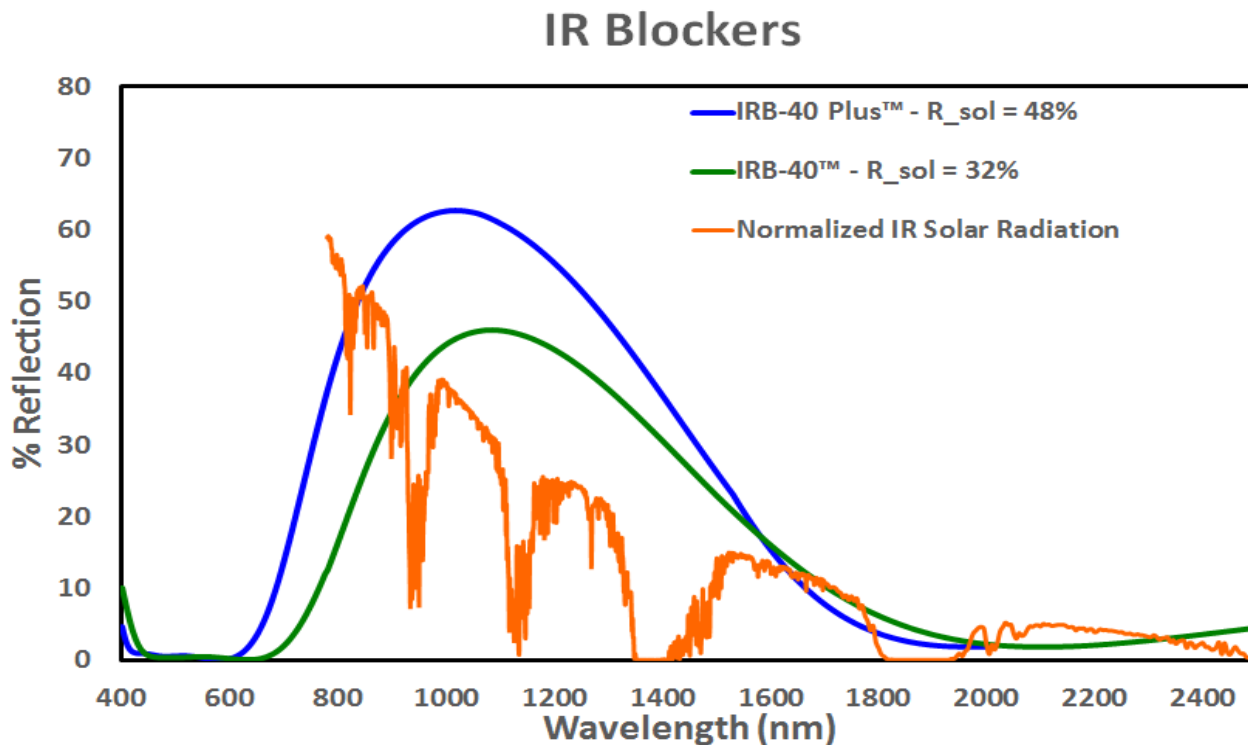
Thickness (mm)	3.0	4.0	5.0	6.0
Size (in)	32" x 50"	32" x 50"	32" x 50.7"	32" x 50"
Size (mm)	812.8 x 1270	812.8 x 1270	812.8 x 1288	812.8 x 1270

## Environmental and Durability

- **Humidity Resistance**  
24 hour RH per paragraph 4.5.8 of MIL-C-675C.
- **Abrasion Resistance**  
20 eraser rub per paragraph 4.5.10 of MIL-C-675
- **Coating Adhesion**  
"Snap tape" per paragraph 4.5.12 of MIL-C-675C.
- **Salt Solubility**  
24 hours per paragraph 4.5.7 of MIL-C-675C.

# IR Blocker 40™ and IR Blocker 40 Plus™

## Spectral Performance



## Performance and Operating Characteristics

CONFIGURATION	Reflected Brightness (Overall in Air)	Reflected Color	Visible Transmittance	Nominal Peak %R	IR Reflection Peak $\lambda$	$R_{solar\ thermal}^*$	Solar Heat Gain (SHGC)
IRB-40™	$Y < 0.7\%$ *	$a^* = 0$ to 20 $b^* = -5$ to -27	93.0%	42%	1075 nm	32%	0.754
IRB-40 PLUS™	$Y < 1.4\%$	$a^* = 5$ to 35 $b^* = -10$ to -40	97.0%	57%	1025 nm	48%	0.705
IRB-40 PLUS IM™	$Y < 1.6\%$	$a^* = 5$ to 50 $b^* = -15$ to -45	96.8%	54%	1050 nm	43%	0.723
IRB-40™ • HEA®	$Y < 0.9\%$	$a^* = -3$ to 30 $b^* = -5$ to -35	97.5%	46%	1075 nm	36%	0.767

\* IRB-40™ reflected brightness of coated surface (second surface not included)

Performance properties based on 5mm clear soda lime float glass

$R_{solar\ thermal}$  is defined as the integrated reflectance of the solar energy from 780nm to 2500nm. (Ref. ISO 9050)

**For ordering or additional product information, please contact us at [www.macthinfilms.com](http://www.macthinfilms.com)**

2721 Giffen Avenue, Santa Rosa CA 95407 • P +1-707-791-1650 F +1-707-791-1701

Copyright © 2021 MAC Thin Films. Product specifications and descriptions in this document are subject to change without notice.