



ALPOLIC® 350 BACKPLATES

**LIGHT  
HAWK™**



**Korman Signs**  
INC.





# CONTENTS

<i>LightHawk ALPOLIC 350 Backplates</i> .....	2
<i>Backplate Models</i> .....	4
<i>Specifications</i> .....	6
<i>Warranties</i> .....	8
<i>FHWA Technical Summary</i> .....	17



# LIGHT HAWK™ ALPOLIC® 350 BACK PLATES

## Product Overview

### THE LATEST TECHNOLOGICAL ADVANCE IN SIGNAL BACK PLATES

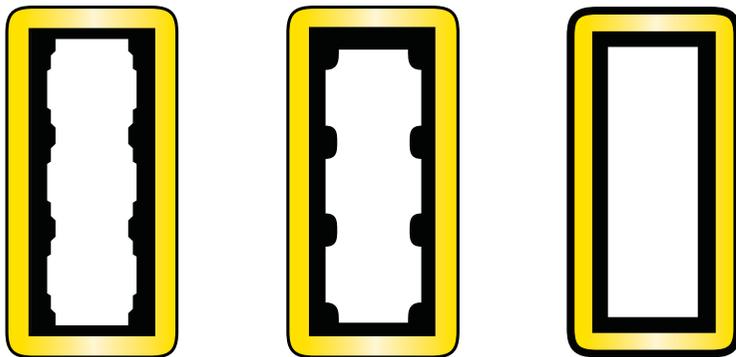
is here, the Korman Signs **LIGHTHAWK** Series. They are made from ALPOLIC 350, a proven lightweight aluminum composite material, and 3M™ Diamond Grade Cubed (DG3) state-of-the-art reflective sheeting to produce a twelve year finished product. No longer do you have to worry about fading, cracking, & peeling failures.

*The comparisons to conventional signal plates are light years apart.*



## Multiple Configurations

The **LIGHTHAWK** ALPOLIC 350 Back Plates are furnished with a variety of reflective patterns, grades, and widths.



*Give us a call at 1-800-296-6050*

and use our 40+ years of manufacturing expertise to order, to request specifications, to request a sample, or to inquire further about this exciting new product!



### [LIGHTWEIGHT]

Lighter than plastic or aluminum - 2mm thick at .57 lbs/sq ft



### [STRENGTH]

Thicker and structurally stronger than conventional material



### [VISIBILITY]

3M DG3 Sheeting is the brightest technology available from any angle



### [DURABILITY]

Fluoropolymer finish & reflective sheeting provide 12 year expected life



### [FABRICATION]

Any brand, size, fit, and shape via CNC machining operation



### [SAFETY]

Fluorescent yellow yields ultimate intersection awareness day or night



### [TESTING]

Wind tunnel and night time field demonstration



### [ECONOMICS]

Very low net life cost investment



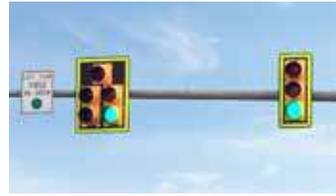
### [SPECIFICATIONS]

Made to meet any DOT spec

# *In a nut shell : The LightHawk is lighter and brighter*



*Night demos testing varying levels of reflective sheeting & layouts*



*Reflective back plates increase traffic signal visibility at intersections*

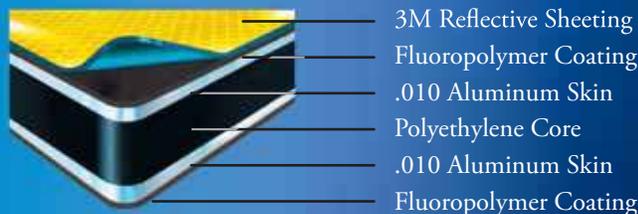


A number of studies have confirmed the safety value of reflectorized signal back plates. The **LIGHTHAWK ALPOLIC 350** Back Plates are an innovative and more effective approach to fulfilling the goal of improving intersection safety and reducing accidents. The weight to structural strength ratio of the ALPOLIC 350 and the high performance of the 3M reflective sheeting is unmatched and

virtually prolongs the need of maintenance for the life of the signal light assembly itself. Additional features include the use of 3M VHB™ Tape for splicing which spread the stress load across the length of the joint. The **LIGHTHAWK** brand Back Plate is manufactured and made in the USA by Korman Signs, Inc. It can be fabricated to fit any signal head assembly using the latest CNC routing equipment shown below.

## *ALPOLIC 350*

ALPOLIC® 350 is an aluminum/polyethylene/aluminum composite material that can be used in place of solid aluminum and other rigid sign substrates. The composite material is manufactured by laminating two skins of aluminum to both sides of an extruded thermoplastic core under tension and pressure. The resulting composite product is light, exceptionally flat, strong, rigid, and resistant to breakage. For backplate applications ALPOLIC 350 is coated with a black fluoropolymer finish on both sides presenting a suitable substrate for the acceptable adhesion of 3M reflective sheeting.



*Cross section of LIGHTHAWK ALPOLIC 350 Back Plate – A Hi-Tech Aluminum Composite Material Manufactured By Mitsubishi Plastics Composites America*



## *Diamond Grade Cubed - DG3*

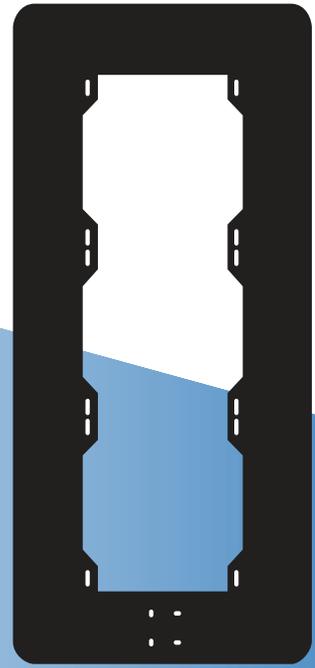
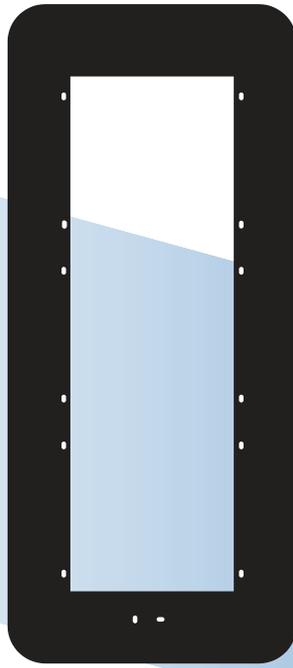
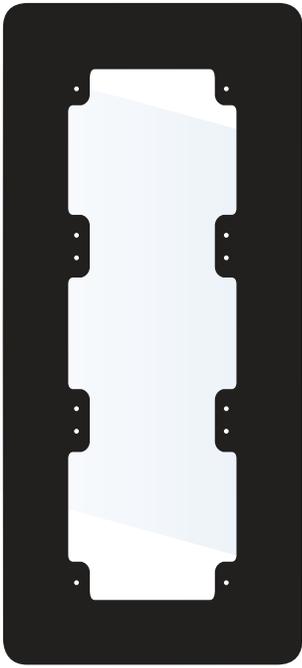
3M™ Diamond Grade™ DG<sup>3</sup> Reflective Sheeting is the first-of-its-kind to meet the ASTM Type XI spec and is designed as an effective alternative for all types of conventional reflective sign sheeting being used currently.

This state-of-the-art, full cube prismatic reflective sheeting ensures optimal performance at all sight distances. The optical elements of the DG<sup>3</sup> Sheeting Series return almost 60% of available light to road users - nearly twice the reflectivity when compared to conventional prismatic sheeting.

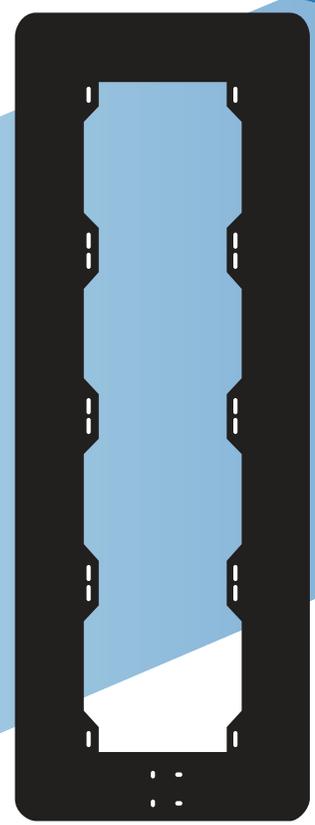
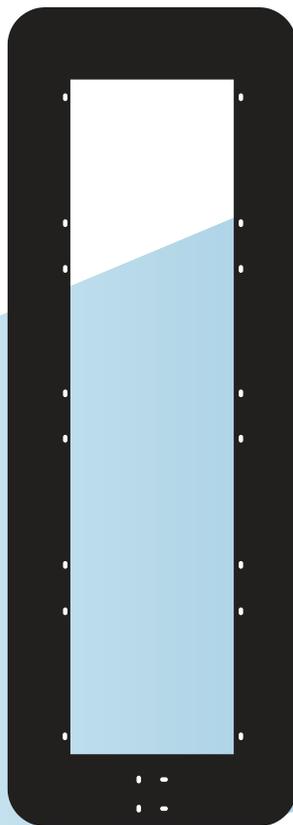
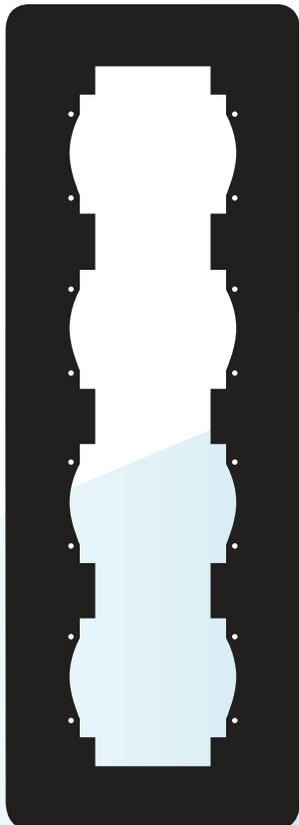
# BACKPLATE MODELS

*Additional models available based on signal manufacturer and light configuration - 3 section, 4 section, 5 section doghouse, in line, etc.*

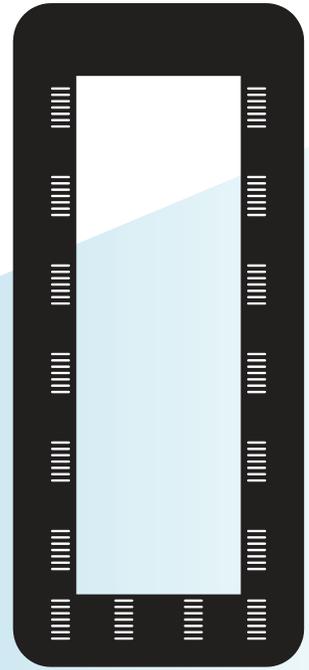
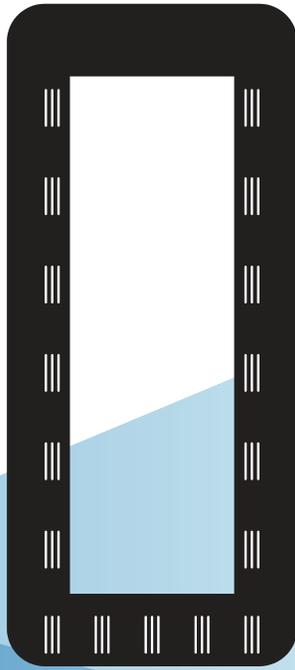
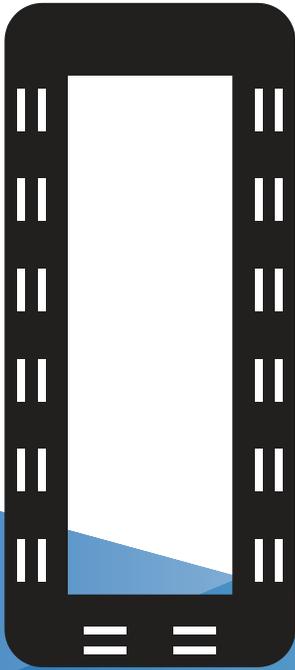
## *3 Section*



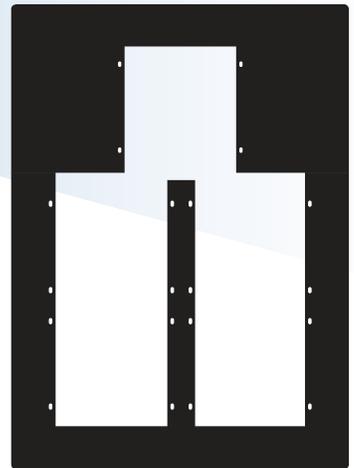
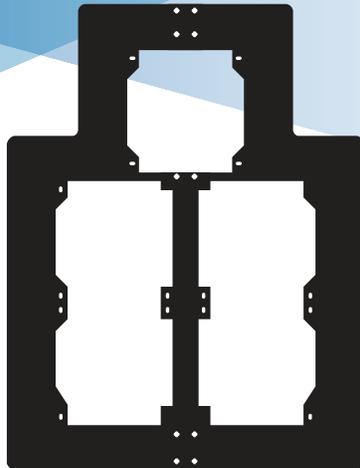
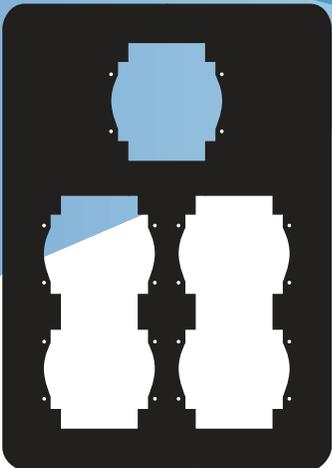
## *4 Section*



*Slotted or Louvered*



*5 Section*



*Lowered and Slotted Designs Available Upon Request*