

# SIGNS AND SUPPORT SYSTEM

Any product that meets the requirements of Alberta Transportation Standard Specifications for Highway Construction, Specification 5.18 Supply of Permanent Highway Signs, Posts and Bases or Highway Maintenance Specifications, Specification 54.12 Supply of Permanent Highway Signs; Specification 54.13 Maintenance of Highway Signs; qualifies under this section.

# STANDARD SIGNS

Aluminum for standard signs shall be a minimum of 2 mm flat sheet tension leveled, sign grade aluminum and shall conform to the requirements of ASTM B209M, "Specification for Aluminum and Aluminum-Alloy Sheet and Plate", Alloys 6061-T6 or 5052-H38.

### NON-STANDARD SIGN

Extruded Aluminum panels for major signs, shall be Alcan Shape # 73247 with anodize treatment and shall conform to ASTM B221M "Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes", Alloys 6061-T6 or 6063-T5.

Plywood – Sanded one side
<sup>3</sup>/<sub>4</sub>" 100/100 or 120/120 Hi-Density

### BACKING

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS

#### **REFLECTIVE SHEETING**

#### **REGULATORY/WARNING/INFORMATION SIGNS**

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type III or Type IV High Intensity Retro-reflective Sheeting.

#### PROPRIETARY

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
3M High Intensity Prismatic	<u>Oralite 5900</u>	
3M 3930sheeting	(Expiry Date: Dec. 2024)	
6000 HP (Avery Dennison)		
REPORT		
Avery Dennison T7500 Series		



# TEMPORARY ORANGE WORK ZONE/CONSTRUCTION SIGNS

The orange portion of all signs and barricades shall be fully reflectorized using High Brightness, Retroreflective unmetalized, Prismatic Sheeting Material which incorporates durable, transparent, fluorescent pigment and meets the brightness requirements as specified in ASTM D4956 Type VIII sheeting material.

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
3M Durable Fluorescent	Oralite 5930 Fluorescent	
(3924S)	<u>Orange</u> Apothor site for trial is	
	Another site for trial is required. The sign at a trial	
	site was removed before	
	evaluation.	
Avery Dennison Fluorescent Orange (w-7514)		
<u>3M Diamond Grade</u> Cubed 4084 Series (DG <sup>3</sup> )		
Avery Dennison (Omni-Cube) Fluorescent Orange W-11514		

All other colours shall meet or exceed the minimum requirements as specified in ASTM-D4956 Performance Requirements Type III or Type IV High Intensity Retroreflective Sheeting.

### SCHOOL ZONE AND SCHOOL CROSS WALK AHEAD SIGNS

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type IX or XI Unmetalized Cube Corner Microprismatic Retroreflective Element Material.

### PROPRIETARY

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
		Oralite 7900 Series
		Retroreflective Sheeting
		(Expiry Date: Nov. 2025)
3M Diamond Grade Cubed		ORALITE 9900 Brilliant Grade
4083 Series(DG <sup>3</sup> ) Fluorescent		Premium Reflective Sheeting
<u>Yellow-Green</u>		(Expiry Date: Feb. 2026)
Avery Dennison Fluorescent Yellow-Green Omni-Cube T-11513		

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### SPECIALIZED APPLICATIONS

# STOP, YIELD, WRONG WAY, DO NOT ENTER SIGNS AND OVERHEAD SIGNS WITHOUT ILLUMINATION

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type IX or XI Unmetallized Cube Corner Microprismatic Retroreflective Element Material.

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
		<u>Oralite 7900 Series</u> <u>Retroreflective Sheeting</u> (Expiry Date: Nov. 2025)
<u>3M Diamond Grade</u> Cubed 4000 Series (DG <sup>3</sup> )		ORALITE 9900 Brilliant Grade <u>Premium Reflective Sheeting</u> (Expiry Date: Feb. 2026)
Avery Dennison T-11500 Series		

#### WARNING SIGNS (DESIGN BULLETIN #74/2012)

Reflective sheeting shall meet or exceed minimum requirements as specified in ASTM-D4956 Performance Requirements Type IX or XI Unmetallized Cube Corner Microprismatic Retroreflective Element Material.

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
<u>3M Vinyl Roll</u> Up RS-33	RRFB-Pro system	Oralite 7900 Series
Fluorescent Pink	(Expiry Date: October 2026)	Retroreflective Sheeting (Expiry Date: Nov. 2026)
3M Diamond Grade Cubed		ORALITE 9900 Brilliant Grade
4081 Series (DG <sup>3</sup> )		Premium Reflective Sheeting
Fluorescent Yellow		(Expiry Date: February 2026)
Avery Dennison T-11511		R920-MX Crosswalk Flashing
Fluorescent Yellow		<u>Beacon</u>
		(Expiry Date: February 2027)
BlinkerBeacon Solar Flashing		AV-400 Solar RRFB
LED Single Light		(Expiry Date: January 2027)
FL-1400 Beacon		
AB-9407 Rapid Flashing		



Beacon	
Solar Flashing Beacons	
TAPCO Rapid Rectangular Flashing Beacon	

# **BASES**

Any product that meets the requirements of Alberta Transportation Specification TCS-A4-315 Breakaway Ground Mounted Bases Steel I-Beam Posts qualifies under this section.

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS

### **CLUSTER FRAMES**

Any product that meets the requirements of Alberta Transportation Specification TEB 1.71A C-Cluster Frame qualifies under this section.

The Frames shall be painted with rust resistant aluminum paint or a metal primer and aluminum paint suitable to the Engineer.

# SUPPORTS

### **BREAKAWAY STEEL**

Any product that meets the requirements of Alberta Transportation Specification TCS-A4-310 Breakaway Ground Mounted Bases Steel I-Beam Posts qualifies under this section.

### PROPRIETARY

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
Steel "W" or "S" shapes with breakaway slip base		

#### **BREAK AWAY**

#### PROPRIETARY

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
Kleen Break Model 425		<u>BC1 Round Breakaway</u> <u>Coupler</u> (Expiry Date: August 2025)
Dent Break Away Bolt		BC2 Square Breakaway Coupler (Expiry Date: August 2025)

### WOOD POSTS - BREAK AWAY

#### PROPRIETARY

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
	Post Sign Sleeve (Sign Post	
	<u>Sleeve Collar)</u>	
	(Expiry Date: March 2026)	

#### **POST SUPPORT**

#### PROPRIETARY

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS
Break Safe Support System		

### WOOD POSTS

Wood posts shall be pine or spruce No. 2 or better, as per NLGA, CCA (Copper, Chromate, Arsenate) pressure treated in accordance with CSA 080. Material shall be free from wane.

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS

#### STEEL POSTS

PROVEN PRODUCTS	TRIAL PRODUCTS	POTENTIAL PRODUCTS

### **MOUNTING HARDWARE**

All bolts and hardware shall be galvanized.