

## Product: Freezer-Grade Retro-Reflective Labels



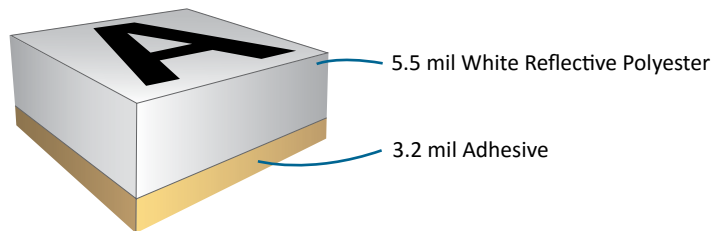
### Product Features

- **Retro-Reflective:** reflects light back to its source at 50 candelas per lumen when tested per ASTM E810.
- **Cold Mount & Operation:** service temperature range of -65°F to 200°F; minimum application temperature of -20°F on most surfaces.
- **Durable Image:** highly readable crisp black graphics on reflective background resist abrasion, general purpose cleaners, mild acids, oil and water.

## Need Long-Range Retro-Reflective Labels for a Cold or Damp Environment?

### Description

Camcode's Freezer-Grade Retro-Reflective Labels combine the benefits of retro-reflectivity (i.e. long-range scanning and reflectivity) with a construction that can be installed in environments as cold as -20°F. The label is constructed of a 5.5 mil retro-reflective polyester film facestock and an adhesive that is FDA 175.105 compliant (for applications where incidental contact between food and adhesives could occur). The system is resistant to abrasion, general purpose cleaners, mild acids, oil and water. Expected exterior life is two years.



### Product Specifications

- Material** 5.5 mil white reflective polyester film, 3.2 mil adhesive layer and 0.8 mil release liner.
- Adhesive** 1.0 mil permanent pressure-sensitive adhesive. Direct adhesion, two-sided, fixed mount, hanging, and pipe mount.
- Attachment** hanging, and pipe mount.
- Label Copy** Several font types are available as well as logos or other design elements.
- Symbologies** All common symbologies available including code 3 of 9, I2 of 5, 128 and Data matrix.
- Colors** Black graphics on white background; color options available.
- Standard Sizes** Several standard and custom sizes available.
- Packaging** Shipped in sequential order, in boxed rolls or in boxes depending on mounting method. 100% no missing numbers.
- Shipment** 10 working days from receipt of order and approval of artwork. Expedited shipment is available for an additional charge.

# Freezer-Grade Retro-Reflective Labels

## Durability Characteristics

Product Data	Value	Test Method
<b><i>Physical Properties</i></b>		
Thickness (mils[microns])	Film: 5.5 mil +/- 10% Adhesive: 3.2 mil +/- 10% Liner: 0.8 mil +/- 10%	ASTM D 3652
Reflective Intensity (cd/lux/sq.m.)	50 candelas per lumen	ASTM E810 (-4° entrance angle, 0.2° observation angle)
<b><i>Adhesive Properties</i></b>		
Stainless Steel	Loop Tack: 2.7 PSI Peel Adhesion: 2.2-3.0 PLI	
Polypropylene	Loop Tack: 2.9 PSI Peel Adhesion: 1.8-2.4 PLI	
<b><i>Expected Exterior Life</i></b>	Two Years	
<b><i>Service Temperature Range</i></b>	-65°F to 200°F	
<b><i>Minimum Application Temperature</i></b>	-20°F on most surfaces	
<b><i>Storage Stability</i></b>	Two years when stored at 70°F (21°C) and 50% RH.	

Note: Users must test products in the specific environment anticipated.  
Camcode does not warrant performance of its materials in any environment.