



Specifications

Model H960 Low Profile

Two Way, All Weather, Snowplowable, Raised Reflective Pavement Marker

Hallen Products, Ltd.
2500 Westward Dr., Unit #2
Spring Grove, Illinois 60081 USA

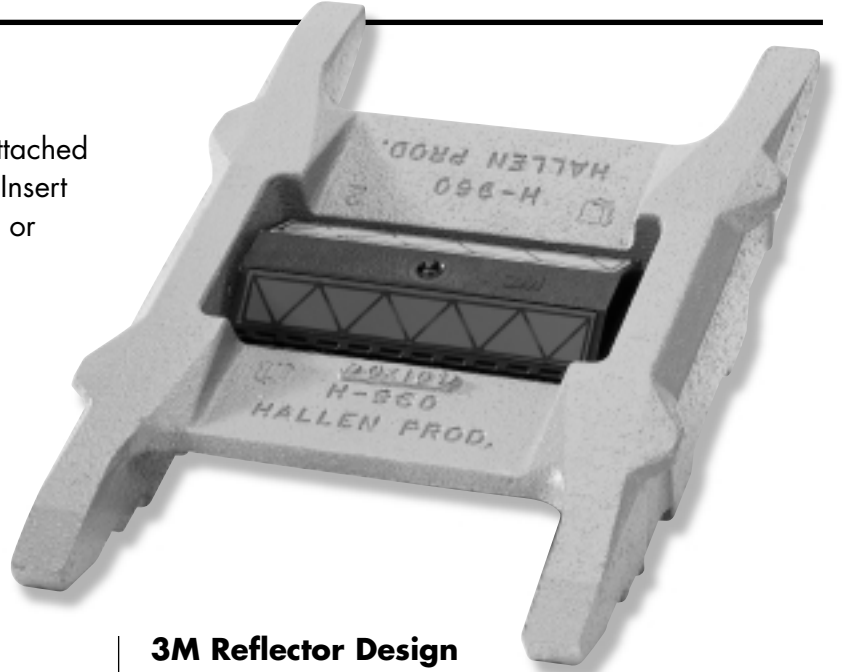
Phone: 815/675-3100
Fax: 815/675-3110
email: hallen@ais.net

Description

Marker consists of Iron casting to which is attached a replaceable 3M™ Snowplowable Marker Insert (Series 190) for reflecting light from a single or opposite directions. Reflector features:

- Polycarbonate prismatic optics,
- Abrasion resistant lens hardcoat,
- Impact resistant polycarbonate body.

All aspects of reflector installation are factory controlled to insure proper adhesion to casting.



Dimensional Details

Overall Dimensions are approximately:

- 9.3 inches long
- 5.86 inches wide
- 1.7 inches high
- Installed Height is approximately .250 inches above road surface

Material

Nodular Iron, conforming to Specification ASTM A536-84 Hardened to 52-54 Rockwell "C".

Surface

Surfaces of casting shall be free of scale, dirt, rust, oil, grease or any other contaminant which may reduce its bond to the installation adhesive.

Weight

Approximately 5.2 pounds each

Identification

Casting is marked with manufacturer's name and model number of marker.

3M Reflector Design and Fabrication

Construction Details:

- Polycarbonate body and lens
- Dimensions are approximately 3.95 inches long (100 mm) by 1.9 inches wide (48 mm) and 0.4 inches high (10 mm)
- Face Angle: 30 Degrees
- Area of Reflecting Surface: 1.84 in² (11.9 cm²)
- Pad Thickness: .04 inches (1.0 mm)

3M Optical Performance

(0.2) observation angle; (measured in cd/ftcd)

| Entrance Angle | 0° | 20° |
|----------------|-----|-----|
| White | 3.0 | 1.2 |
| Yellow | 1.8 | .72 |
| Red | .75 | .30 |

Note

3M Snowplowable Marker Series 190 are provided in new Hallen Products castings and can also be applied as replacement markers in Hallen Products castings. The 190 series markers are manufactured with an adhesive layer and peel-away liner and can be installed in existing castings using Liquid Nails LN-602 adhesive. Please follow the detailed instructions in the Information Folder 190, *Application Procedures for 3M Snowplowable Marker*, available from 3M by calling technical service at 1-800-553-1380.



Specifications

Model H960HP High Profile

Two Way, All Weather, Snowplowable, Raised Reflective Pavement Marker

Hallen Products, Ltd.
4090 Ryan Road, Suite A
Gurnee, Illinois 60031 USA

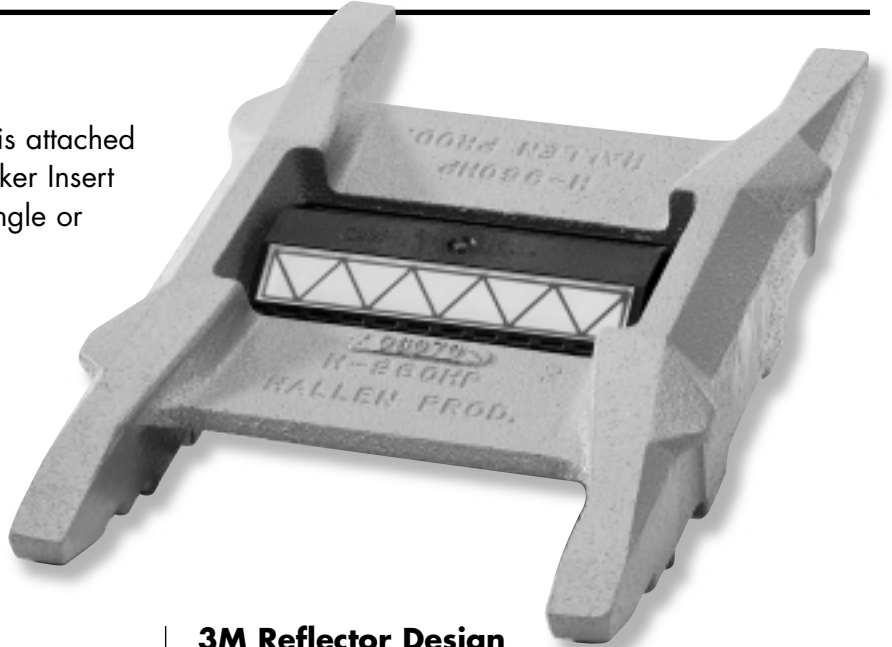
Phone: 847/662-6868
Fax: 847/662-7129
email: hallen@ais.net

Description

Marker consists of Iron casting to which is attached a replaceable 3M™ Snowplowable Marker Insert (Series 190) for reflecting light from a single or opposite directions. Reflector features:

- Polycarbonate prismatic optics,
- Abrasion resistant lens hardcoat,
- Impact resistant polycarbonate body.

All aspects of reflector installation are factory controlled to insure proper adhesion to casting.



Dimensional Details

Overall Dimensions are approximately:

- 9.3 inches long
- 5.86 inches wide
- 1.91 inches high
- Installed Height is approximately .410 inches above road surface

Material

Nodular Iron, conforming to Specification ASTM A536-84 Hardened to 52-54 Rockwell "C".

Surface

Surfaces of casting shall be free of scale, dirt, rust, oil, grease or any other contaminant which may reduce its bond to the installation adhesive.

Weight

Approximately 6.2 pounds each

Identification

Casting is marked with manufacturer's name and model number of marker.

3M Reflector Design and Fabrication

Construction Details:

- Polycarbonate body and lens
- Dimensions are approximately 3.95 inches long (100 mm) by 1.9 inches wide (48 mm) and 0.4 inches high (10 mm)
- Face Angle: 30 Degrees
- Area of Reflecting Surface: 1.84 in² (11.9 cm²)
- Pad Thickness: .04 inches (1.0 mm)

3M Optical Performance

(0.2) observation angle; (measured in cd/ftcd)

| Entrance Angle | 0° | 20° |
|----------------|-----|-----|
| White | 3.0 | 1.2 |
| Yellow | 1.8 | .72 |
| Red | .75 | .30 |

Note

3M Snowplowable Marker Series 190 are provided in new Hallen Products castings and can also be applied as replacement markers in Hallen Products castings. The 190 series markers are manufactured with an adhesive layer and peel-away liner and can be installed in existing castings using Liquid Nails LN-602 adhesive. Please follow the detailed instructions in the Information Folder 190, *Application Procedures for 3M Snowplowable Marker*, available from 3M by calling technical service at 1-800-553-1380.



Specifications

Model H1010 Low Profile—Narrow

Two Way, All Weather, Snowplowable, Raised Reflective Pavement Marker

Hallen Products, Ltd.
4090 Ryan Road, Suite A
Gurnee, Illinois 60031 USA

Phone: 847/662-6868
Fax: 847/662-7129
email: hallen@ais.net

Description

Marker consists of Iron casting to which is attached a replaceable 3M™ Snowplowable Marker Insert (Series 190) for reflecting light from a single or opposite directions. Reflector features:

- Polycarbonate prismatic optics,
- Abrasion resistant lens hardcoat,
- Impact resistant polycarbonate body.

All aspects of reflector installation are factory controlled to insure proper adhesion to casting.

Dimensional Details

Overall Dimensions are approximately:

- 10 inches long
- 4.9 inches wide
- 1.75 inches high
- Installed Height is approximately .250 inches above road surface

Material

Nodular Iron, conforming to Specification ASTM A536-84 Hardened to 52-54 Rockwell "C".

Surface

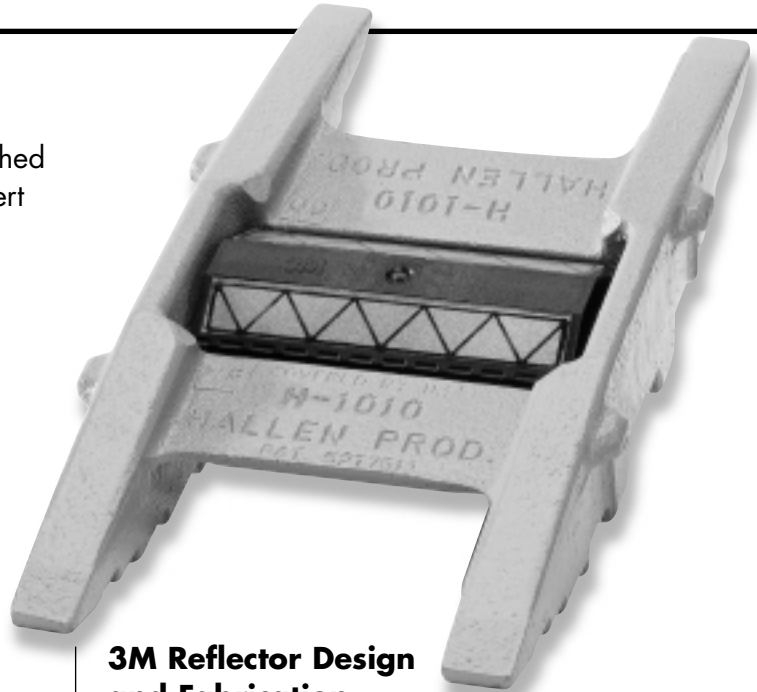
Surfaces of casting shall be free of scale, dirt, rust, oil, grease or any other contaminant which may reduce its bond to the installation adhesive.

Weight

Approximately 5.8 pounds each

Identification

Casting is marked with manufacturer's name and model number of marker.



3M Reflector Design and Fabrication

Construction Details:

- Polycarbonate body and lens
- Dimensions are approximately 3.95 inches long (100 mm) by 1.9 inches wide (48 mm) and 0.4 inches high (10 mm)
- Face Angle: 30 Degrees
- Area of Reflecting Surface: 1.84 in² (11.9 cm²)
- Pad Thickness: .04 inches (1.0 mm)

3M Optical Performance

(0.2) observation angle; (measured in cd/ftcd)

| Entrance Angle | 0° | 20° |
|----------------|-----|-----|
| White | 3.0 | 1.2 |
| Yellow | 1.8 | .72 |
| Red | .75 | .30 |

Note

3M Snowplowable Marker Series 190 are provided in new Hallen Products castings and can also be applied as replacement markers in Hallen Products castings. The 190 series markers are manufactured with an adhesive layer and peel-away liner and can be installed in existing castings using Liquid Nails LN-602 adhesive. Please follow the detailed instructions in the Information Folder 190, *Application Procedures for 3M Snowplowable Marker*, available from 3M by calling technical service at 1-800-553-1380.



Specifications

Model H1010HP High Profile—Narrow

Two Way, All Weather, Snowplowable, Raised Reflective Pavement Marker

Hallen Products, Ltd.
4090 Ryan Road, Suite A
Gurnee, Illinois 60031 USA

Phone: 847/662-6868
Fax: 847/662-7129
email: hallen@ais.net

Description

Marker consists of Iron casting to which is attached a replaceable 3M™ Snowplowable Marker Insert (Series 190) for reflecting light from a single or opposite directions. Reflector features:

- Polycarbonate prismatic optics,
- Abrasion resistant lens hardcoat,
- Impact resistant polycarbonate body.

All aspects of reflector installation are factory controlled to insure proper adhesion to casting.

Dimensional Details

Overall Dimensions are approximately:

- 10 inches long
- 4.9 inches wide
- 1.90 inches high
- Installed Height is approximately .410 inches above road surface

Material

Nodular Iron, conforming to Specification ASTM A536-84 Hardened to 52-54 Rockwell "C".

Surface

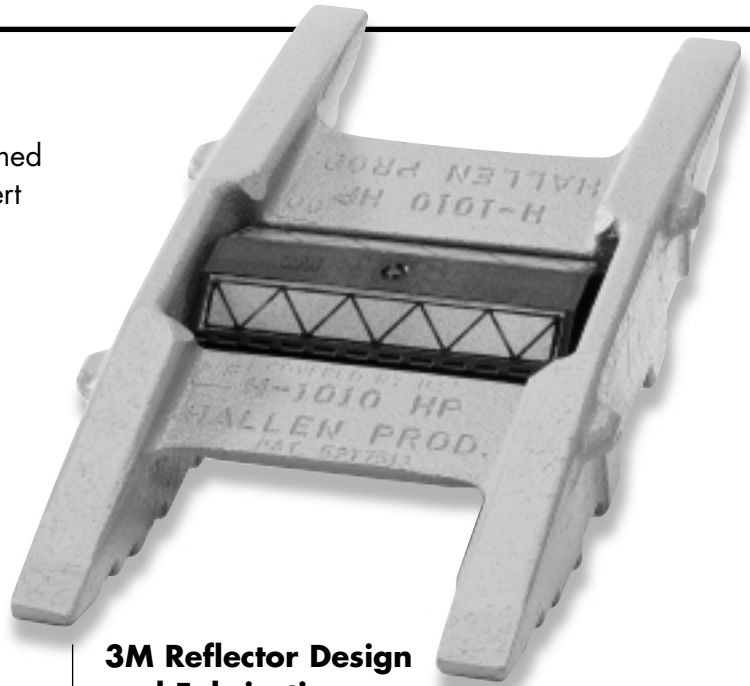
Surfaces of casting shall be free of scale, dirt, rust, oil, grease or any other contaminant which may reduce its bond to the installation adhesive.

Weight

Approximately 5.8 pounds each

Identification

Casting is marked with manufacturer's name and model number of marker.



3M Reflector Design and Fabrication

Construction Details:

- Polycarbonate body and lens
- Dimensions are approximately 3.95 inches long (100 mm) by 1.9 inches wide (48 mm) and 0.4 inches high (10 mm)
- Face Angle: 30 Degrees
- Area of Reflecting Surface: 1.84 in² (11.9 cm²)
- Pad Thickness: .04 inches (1.0 mm)

3M Optical Performance

(0.2) observation angle; (measured in cd/ftcd)

| Entrance Angle | 0° | 20° |
|----------------|-----|-----|
| White | 3.0 | 1.2 |
| Yellow | 1.8 | .72 |
| Red | .75 | .30 |

Note

3M Snowplowable Marker Series 190 are provided in new Hallen Products castings and can also be applied as replacement markers in Hallen Products castings. The 190 series markers are manufactured with an adhesive layer and peel-away liner and can be installed in existing castings using Liquid Nails LN-602 adhesive. Please follow the detailed instructions in the Information Folder 190, *Application Procedures for 3M Snowplowable Marker*, available from 3M by calling technical service at 1-800-553-1380.

Specifications

Model 664 Low Profile

Two Way, All Weather, Snowplowable, Raised Reflective Pavement Marker

Description

Marker consists of Iron casting to which is attached a replaceable 3M™ Snowplowable Marker Insert (Series 190) for reflecting light from a single or opposite directions. Reflector features:

- Polycarbonate prismatic optics,
- Abrasion resistant lens hardcoat,
- Impact resistant polycarbonate body.

All aspects of reflector installation are factory controlled to insure proper adhesion to casting.



Dimensional Details

Overall Dimensions are approximately:

- 7.75 inches long
- 5.86 inches wide
- 1.34 inches high
- Installed Height is approximately .250 inches above road surface

Material

Nodular Iron, conforming to Specification ASTM A536-84 Hardened to 52-54 Rockwell "C".

Surface

Surfaces of casting shall be free of scale, dirt, rust, oil, grease or any other contaminant which may reduce its bond to the installation adhesive.

Weight

Approximately 6 pounds each

Identification

Casting is marked with manufacturer's name and model number of marker.

3M Reflector Design and Fabrication

Construction Details:

- Polycarbonate body and lens
- Dimensions are approximately 3.95 inches long (100 mm) by 1.9 inches wide (48 mm) and 0.4 inches high (10 mm)
- Face Angle: 30 Degrees
- Area of Reflecting Surface: 1.84 in² (11.9 cm²)
- Pad Thickness: .04 inches (1.0 mm)

3M Optical Performance

(0.2) observation angle; (measured in cd/ftcd)

| Entrance Angle | 0° | 20° |
|----------------|-----|-----|
| White | 3.0 | 1.2 |
| Yellow | 1.8 | .72 |
| Red | .75 | .30 |

Note

3M Snowplowable Marker Series 190 are provided in new Hallen Products castings and can also be applied as replacement markers in Hallen Products castings. The 190 series markers are manufactured with an adhesive layer and peel-away liner and can be installed in existing castings using Liquid Nails LN-602 adhesive. Please follow the detailed instructions in the Information Folder 190, *Application Procedures for 3M Snowplowable Marker*, available from 3M by calling technical service at 1-800-553-1380.



Specifications

Model H1010B Low Profile – Narrow

Two Way, All Weather, Snowplowable, Raised Reflective Bridge Pavement Marker

Hallen Products, Ltd.
4090 Ryan Road, Suite A
Gurnee, Illinois 60031 USA

Phone: 847/662-6868
Fax: 847/662-7129
www.ironstar.com email: hallen@ais.net

Description

Marker consists of Iron casting to which is attached a replaceable 3M™ Snowplowable Marker Insert (Series 190) for reflecting light from a single or opposite directions. Reflector features:

- Polycarbonate prismatic optics,
- Abrasion resistant lens hardcoat,
- Impact resistant polycarbonate body.

All aspects of reflector installation are factory controlled to insure proper adhesion to casting.

Dimensional Details

Overall Dimensions are approximately:

- 10 inches long
- 4.9 inches wide
- 1.25 inches high
- Installed Height is approximately .250 inches above road surface

Material

Nodular Iron, conforming to Specification ASTM A536-84 Hardened to 52-54 Rockwell "C".

Surface

Surfaces of casting shall be free of scale, dirt, rust, oil, grease or any other contaminant which may reduce its bond to the installation adhesive.

Weight

Approximately 4.5 pounds each

Identification

Casting is marked with manufacturer's name and model number of marker.



3M Reflector Design and Fabrication

Construction Details:

- Polycarbonate body and lens
- Dimensions are approximately 3.95 inches long (100 mm) by 1.9 inches wide (48 mm) and 0.4 inches high (10 mm)
- Face Angle: 30 Degrees
- Area of Reflecting Surface: 1.84 in² (11.9 cm²)
- Pad Thickness: .04 inches (1.0 mm)

3M Optical Performance

(0.2) observation angle; (measured in cd/ftcd)

| Entrance Angle | 0° | 20° |
|----------------|-----|-----|
| White | 3.0 | 1.2 |
| Yellow | 1.8 | .72 |
| Red | .75 | .30 |

Note

3M Snowplowable Marker Series 190 are provided in new Hallen Products castings and can also be applied as replacement markers in Hallen Products castings. The 190 series markers are manufactured with an adhesive layer and peel-away liner and can be installed in existing castings using Liquid Nails LN-602 adhesive. Please follow the detailed instructions in the Information Folder 190, *Application Procedures for 3M Snowplowable Marker*, available from 3M by calling technical service at 1-800-553-1380.