

The logo for Starline Windows, featuring the word "STARLINE" in red, italicized, uppercase letters above the word "WINDOWS" in red, italicized, uppercase letters. A blue lightning bolt graphic is positioned behind the "A" in "STARLINE" and extends downwards.

Sunshades

Series 9000, 9003, 9100R & 9600

A photograph of a modern multi-story building facade with large glass windows and dark metal frames. The building is viewed from a low angle, looking up. The sky is clear and blue. The image is split into two horizontal sections by a white line.

Quality, Comfort & Peace of Mind



Foreword

This Design Guide provides specifications on the aluminum sunshades which Starline manufactures.

This document is intended to provide information on our standard products. Non-standard designs and applications can be reviewed to determine the feasibility on a project-specific basis.

Please email any project specific enquiries to architectural@starlinewindows.com or technical@starlinewindows.com.

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Starline manufacturers horizontal and vertical sunshades, which are installed post installed to the window wall modules in the field after the window wall modules have been installed. The horizontal and vertical sunshades are available in the following depths:

- 12"
- 16"
- 20"
- 24"
- 28"

Note:

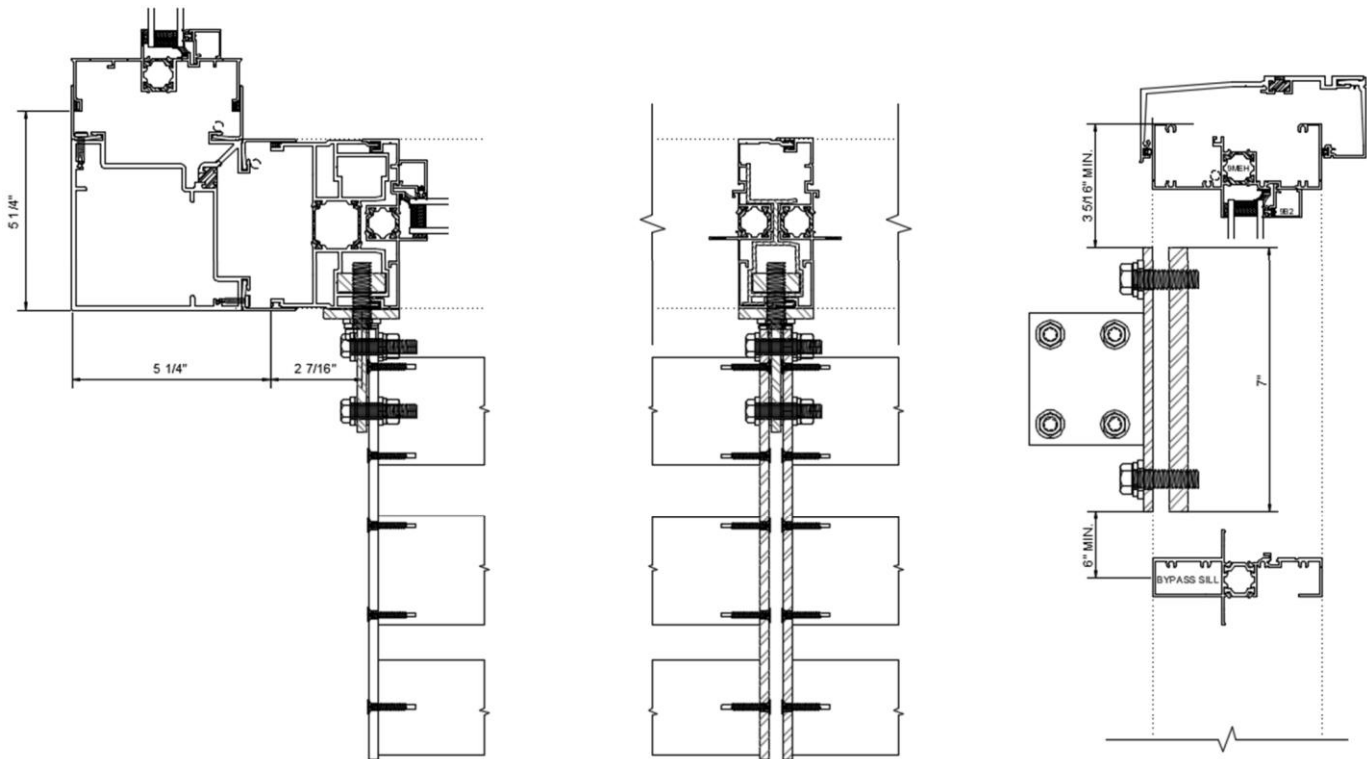
- The sunshades cannot be applied at the window wall bypass or parapets.
- Using both vertical and horizontal sunshades in conjunction with one another is available.

Horizontal Sunshade

Horizontal sunshades are available for the series 9000, 9003, 9100R & 9600 WindowWall systems.

The sunshade must be installed 6" or more up from the centerline of the sill and 3 5/16" down from the head. The sunshades terminate at the seismic jamps and do not go around the corner posts.

Below is an example of a 12" horizontal sunshade at the corner post, coupler, head and sill.

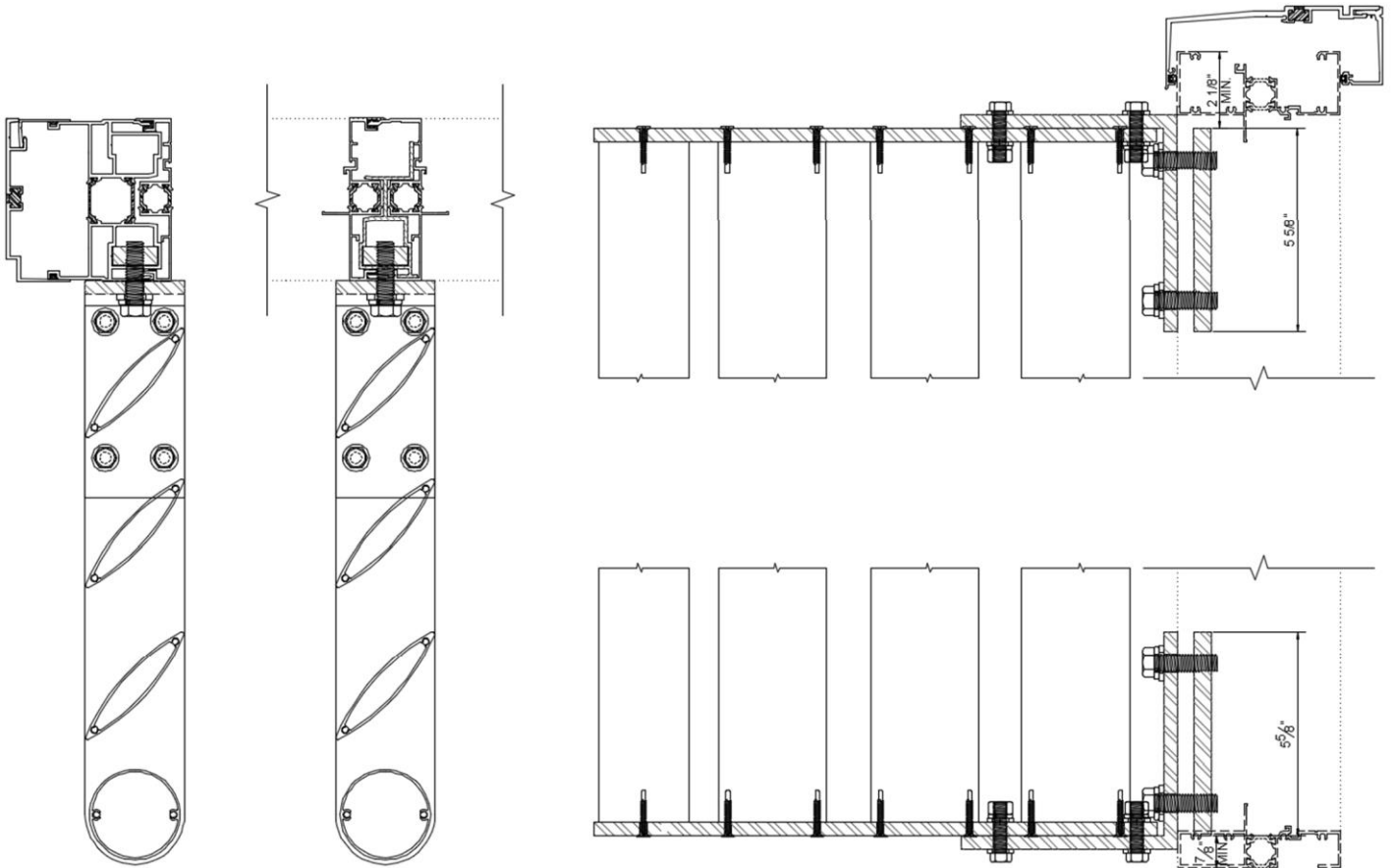


Vertical Sunshade

Vertical sunshades are available for the series 9000, 9003, 9100R & 9600 Window Wall systems.

The sunshade must be installed $7/8"$ or more up from the underside of the sill and $2\ 1/8"$ down from the head. The sunshades terminate at the seismic jamb.

Below is an example of a 16" horizontal sunshade at the seismic jamb, coupler, head and sill.



Sunshade Material

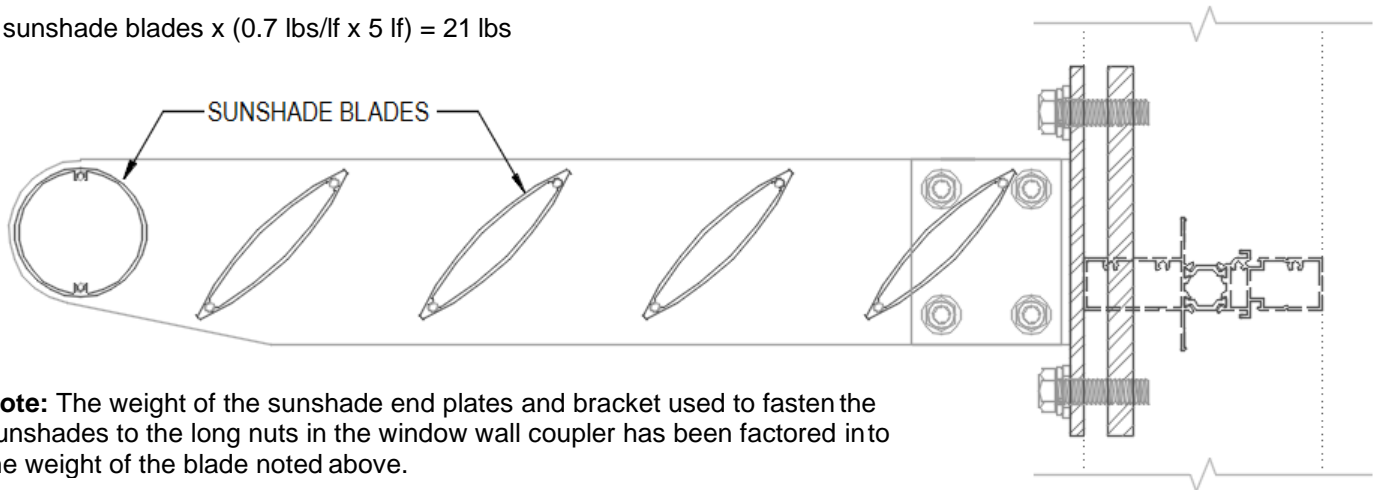
Sunshade Blades

Sunshades are extruded from aluminum 6063 alloy, T5 temper with a minimum thickness of 0.064”.

The weight of the sunshade extrusion is 0.7lbs per blade per lineal foot. Depending on how deep the sunshade is will determine how many blades are used.

Example: A 20” sunshade is selected, and it spans a window module which is 5’ wide. A 20” sunshade has 5 blades.

5 sunshade blades x (0.7 lbs/lf x 5 lf) = 21 lbs



Note: The weight of the sunshade end plates and bracket used to fasten the sunshades to the long nuts in the window wall coupler has been factored into the weight of the blade noted above.

Sunshade End Plates

The end plates are made from aluminum 6005 alloy, T5 temper.

Sunshade T-Angle Bracket Plates

The brackets are made from aluminum 6005 alloy, T6 temper. Bracket thickness varies depending on the specific bracket.

Sunshade Long Nuts

The long nuts are factory installed in the vertical couplers and are made from stainless steel.

Sunshade Screws & Bolts

The screws and bolts are made from stainless steel.

Sunshade Installation

The sunshades are bolted to the window wall frame to the couplers. The coupler will have a long nut installed in them, in the factory. The sunshades are installed in the field after the window wall has been installed.

Sunshade Finishes

Starline finishes the sunshades via powder coating. The powder coating is a high-performance thermoset coating specifically designed for architectural systems.

This coating meets and exceeds with The American Architectural Manufacturers Association (AAMA) 2603 specification standard which covers pigmented organic coatings on aluminum extrusions.

There is an option to upgrade the powder to meet the AAMA 2604 or AAMA 2605 specification on the exterior. Refer to

Refer to the ***Aluminum Finishes (Powder Coating)*** document in the Miscellaneous section of the catalogue for images of the stock and semi-standard colours available, a comparison of some attributes which are tested for in the AAMA 2603, AAMA 2604 and AAMA 2605 specification standards, information on colour retention, and details to consider when selecting colours.