



LINDNER STEELTEC-50

MINIMAL PROFILES – MAXIMUM IMPACT

FROM ARNSTORF THROUGHOUT THE WORLD

The Lindner Group is a family-run construction company, manufacturer of construction products and provider of construction services. We use our manufacturing facilities to produce virtually all system products for interior fit-outs, the building shell and insulation technology: floors, ceilings, luminaires, doors, walls, facades. We continuously apply the highest standards of quality, environmental compatibility and innovation to further develop this range for global use by our customers.

LINDNER STEEL & GLASS

Lindner Steel & Glass is a division of Lindner Fassaden GmbH and is situated in Dettelbach, Germany, where their highly qualified specialist engineers have successfully accomplished complex steel, membrane and glass structures throughout the world. The experienced team not only take on the design and construction planning but is also responsible for the production and assembly on site. In line with the Lindner Group's corporate philosophy, custom solutions are created to optimally combine unique design and function with building performance requirements.



Steeltec 50 is a minimal frame shopfront system developed by Lindner. This flush glazed system is made from state of the art steel profiles, which provide the ultimate in slenderness for any shop front application.

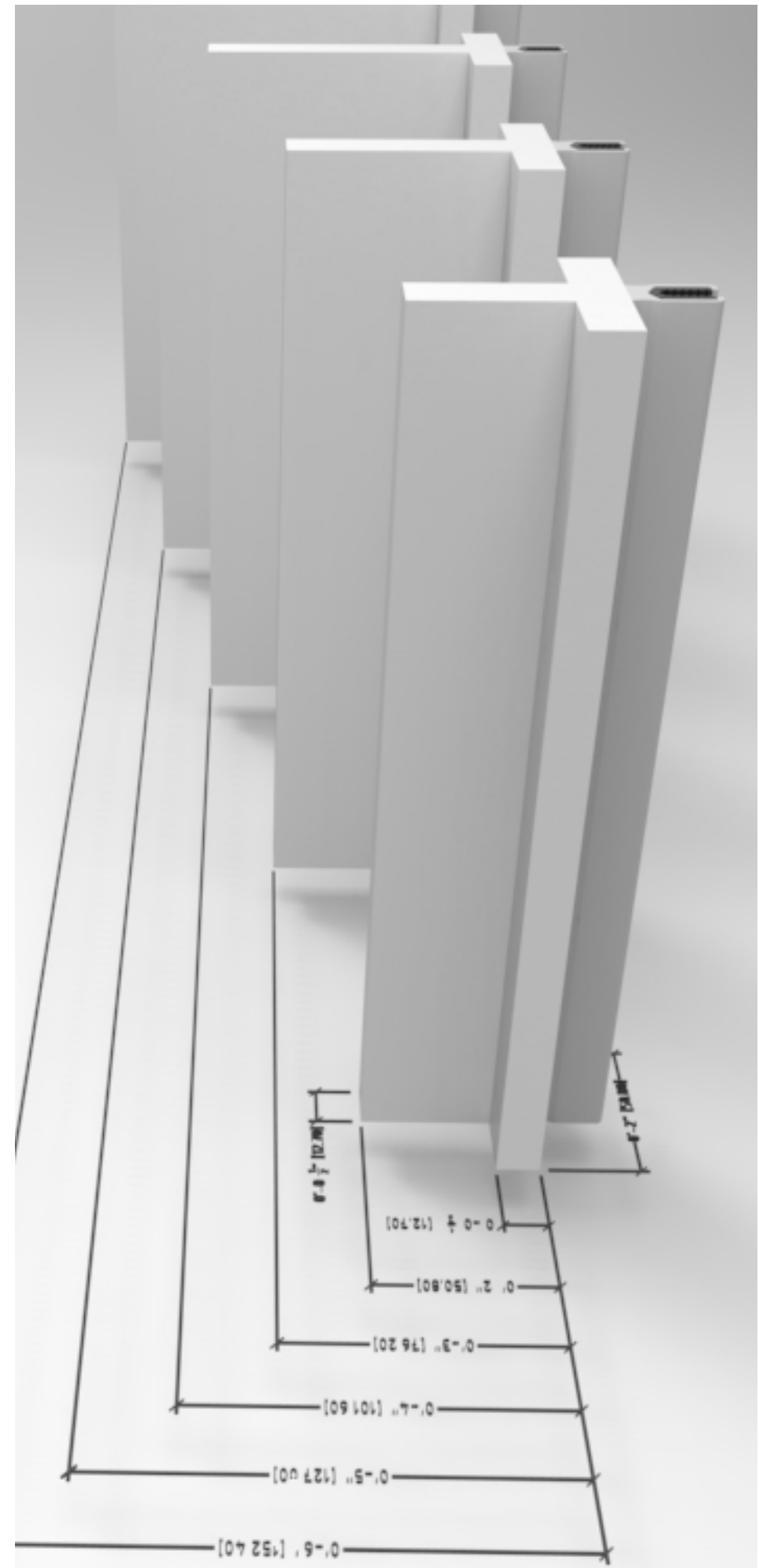
LINDNER STEELTEC-50

Benefits at a glance

- + Steel profiles allow longer spans using only 2 inch wide profiles
- + Glass is flush glazed using Lindner toggle glazing
- + Available in Triple Glazed as well as all current glazing options
- + Oversized glass is available on request up to Super O.S. 10 ft x20 ft IGU
- + Completely hidden fixings between transom and mullion.
- + Pre-fabricated system is shipped to door Nationwide in USA
- + Simple and fast installation.
- + 'Tee' and 'Rectangular' Sections using Lindner sharp edge profile technology
- + Prepared in our USA plant in Colmar PA

LINDNER TECHNOLOGY

Lindner is a leader in façade and envelope technology. We specialize in all forms of cladding and building envelope products. The Steeltec range has been developed by our specialist steel and glass division, based in Dettelbach, Germany. Please visit our web site for more information.



STEELTEC 50

for all shopfront and lobby applications

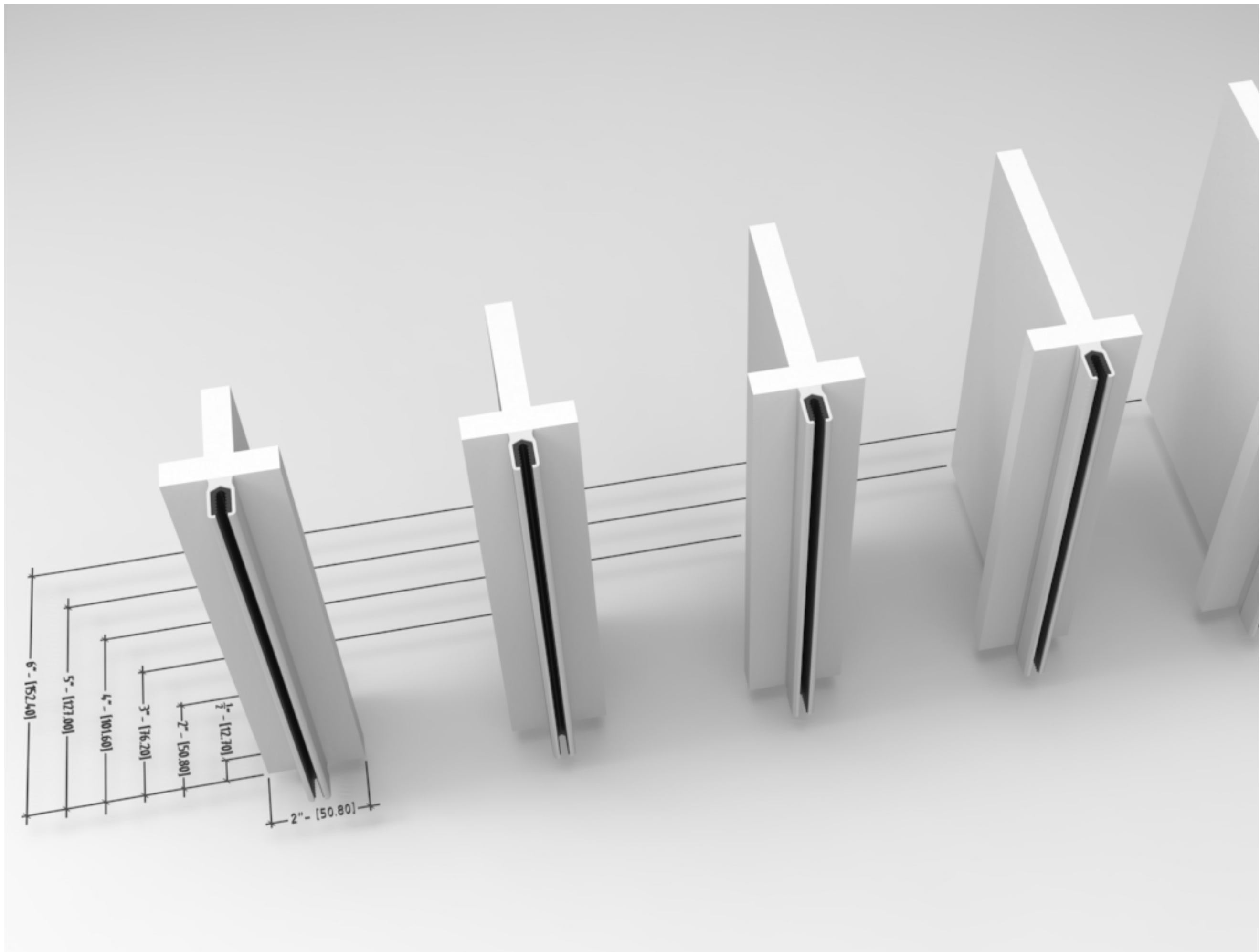
AVAILABLE IN TWO STEEL PROFILE TYPES

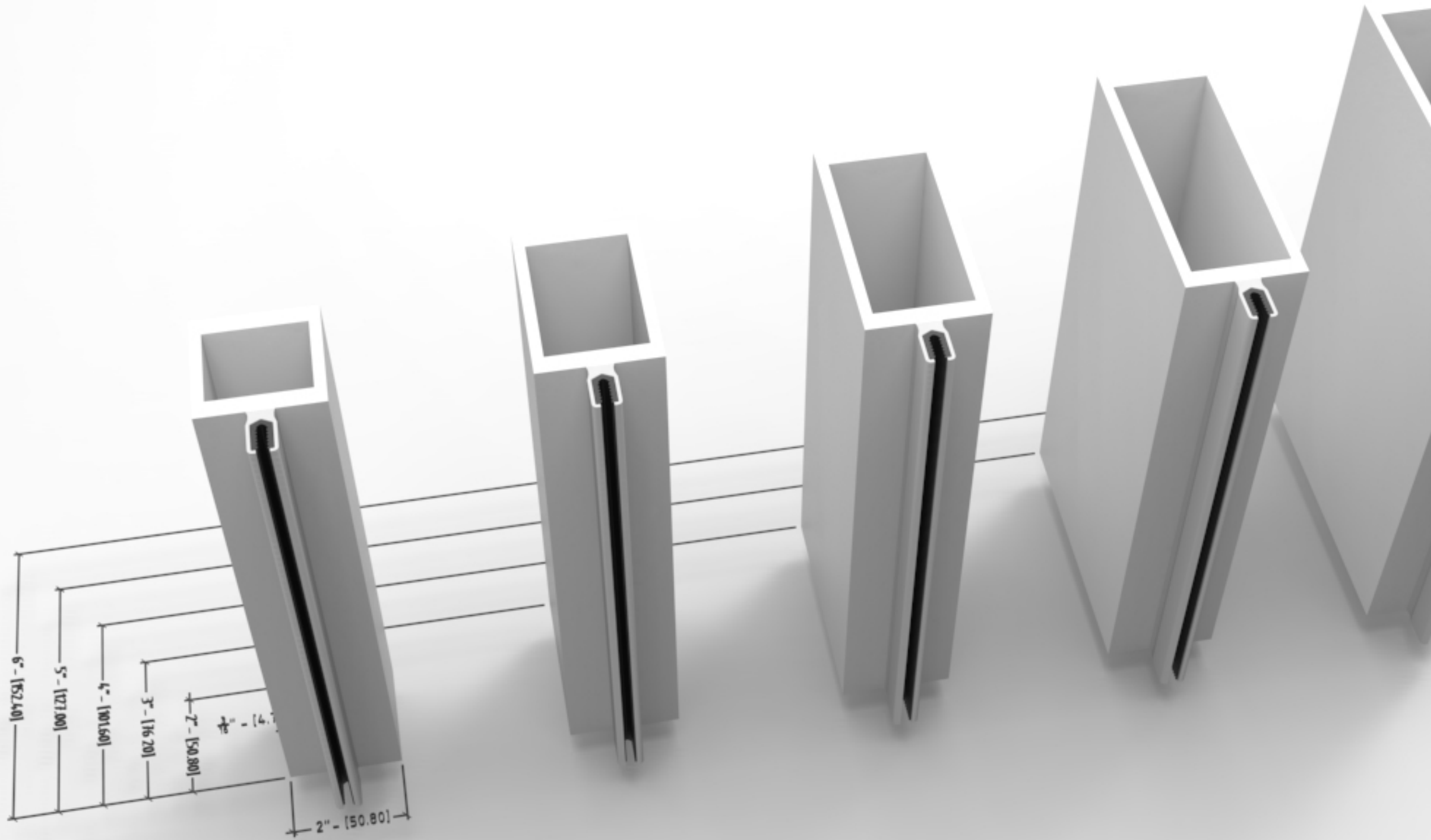
The profiles are manufactured from steel material which is stronger and stiffer than aluminum and can therefore be made in smaller sizes.

ALUMINIUM	STEEL
Stiffness (ksi) 10,000	Stiffness (ksi) 29,000
Strength (ksi) 35	Strength (ksi) 50

TYPE 1

Tee profiles, 2 inches wide with 1/2 inch plate thickness. Recommended for smaller spans below 10 ft. with sharp (eased) edges.





TYPE 2

Rectangular profiles, 2 inches wide. The rectangular form of this profile range results in better stiffness and strength performance than the Tee section profiles. The rectangular sections would therefore generally be used for longer spans.

FINISHES

The Steel profiles are painted with a heavy duty durable coating system and are available in all RAL colors. Custom colors are also available on request.

We are also able to produce stainless steel profiles to special order which can be either polished or bead blasted.

- 1 EPDM Rubber Primary seal is fully continuous. Secondary seal is also available for Transome condition
- 2 Stainless Steel Screw channel is welded to the Custom Steel Profile providing superior structural performance
- 3 Integrated Toggle System for all Glazing Options, in Anodised Aluminium
- 4 Fully Flush external Joints
- 5 Insulated Glass spacers are available in Stainless and Warm Edge
- 6 Modern, Triple Glazing Option is available to increase thermal and acoustic performance

Profile user data	
Flange	b _f = 47 mm
Web	b _w = 27 mm
	g = 122 mm
	t _w = 2.7 mm
Profile calculated values	
Area	A _p = 28.56 cm ²
Weight	g = 0.224 kN/m
Center of gravity	s _y = 85.0 mm
Moment of inertia	I _y = 1139.1 cm ⁴
	I _x = 15.2 cm ⁴
Radius of gyration	r _y = 63.2 mm
	r _x = 7.3 mm
	W _{pl,y} = 107.4 mm ³
Torsional constant	J = 13.71 cm ⁴
approx. Formula	
Summary of Utilizations	
Compression	0.18
Flexure about x	0.62
Flexure about y	0.78
Shear	0.03
Comp+Flexure	0.6
Deflection ratio	
L/t _w	224.22
Sheet validation	
This sheet is valid for the conditions with non-circular elements in compression and for compact and noncompact sections in flexure	
Validation in compression	VALID
Validation in flexure	VALID
Material	
Material name	S355
F _y	355 N/mm ²
F _t	470 N/mm ²
E	210000 N/mm ²
G	80763.92 N/mm ²
Design method	

Structural Calculations are Semi Automated to include geometrical local Wind Load restraints.

SYSTEM COMPONENTS

Gasket System

The gasket seal is a highly durable internally drained system which is thermally broken. The gasketry is designed for our slender 2 inch wide steel profiles.

Glass

Glass is available in all possible formats. The connection system is toggle glazed, which comprises an embedded aluminium carrier profile within the IGU spacer. In this case the spacer is 16mm deep which is slightly deeper than the conventional ½ inch (12 mm). Glass options amongst others are:

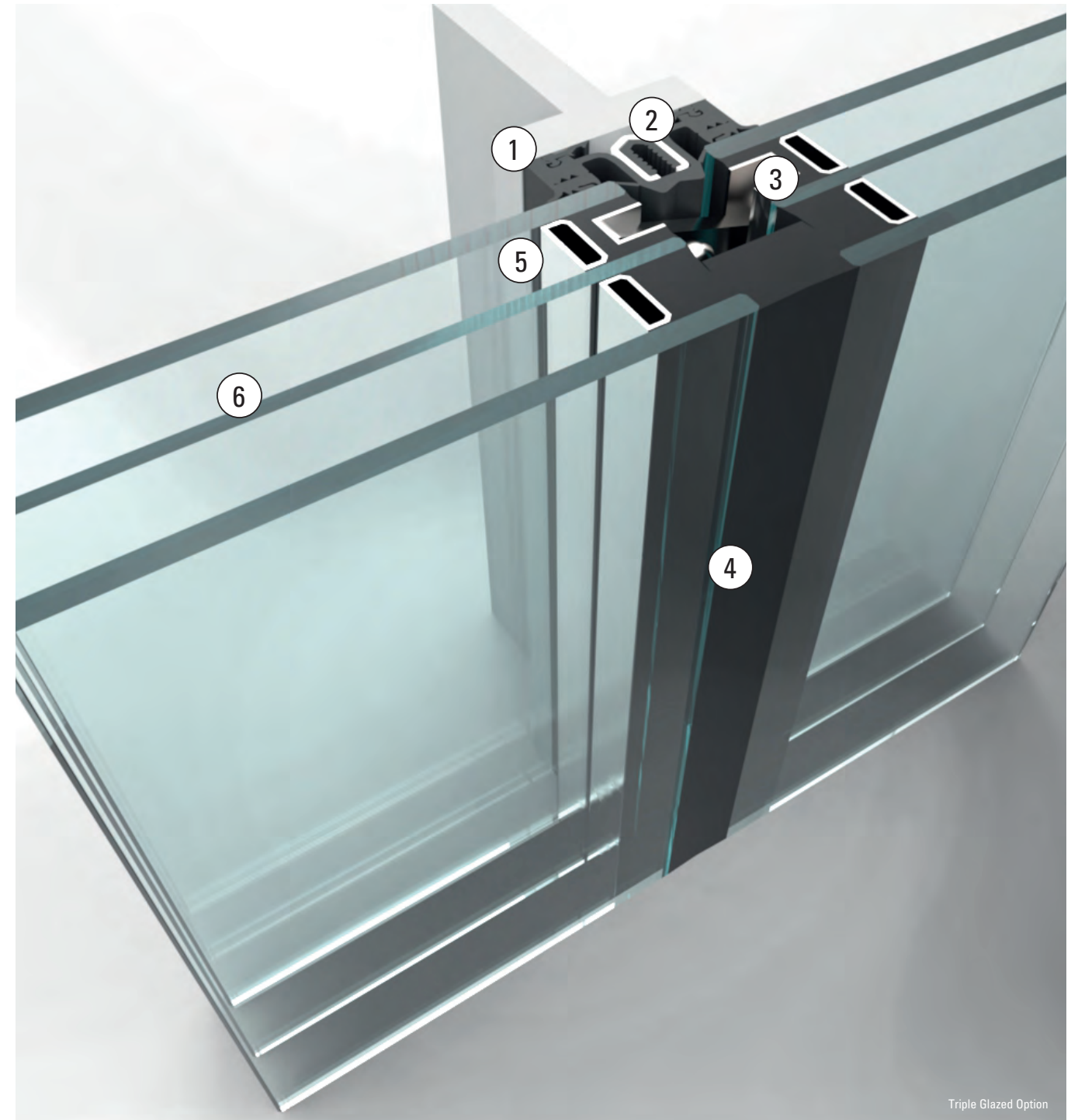
- + Triple Glazed
- + Low Iron
- + Screen Printed
- + Full Range of High-performance Low E Coatings
- + Stepped edges

Our glass panels use Toggle Glazing Technology where a structural channel is bonded inside the glass panel which allows the glass to be dry-fixed to the steel profiles quickly and cleanly. The final external wet seal results in a fully flush glazed appearance.

Oversized and Super Jumbo

Glass is also available in oversized units up to 10 feet wide and 20 feet high. Super-oversized glass is available upon request up to 10 feet wide and 40 feet high.

We have developed a family of modules to suite each design and budget.



MODULE NAME	DIMENSIONS	
	FEET	MM
Module Type M1	5 x 10	1524 x 3048
Module Type M2	10 x 10	3048 x 3048
Module Type M3	5 x 20	1524 x 6096
Module Type M4	10 x 20	3048 x 6096



MODULES AND PROFILE SIZES

We are able to offer 4 principle glass module sizes based on a 5ft x 10ft module. Depending on the module type, the profile selections can be made. The glass thickness and profile sizes are determined from our own software analysis which will take into account local wind and weather loading conditions.



Module Type M4



Module Type M3

OPTIONAL EXTRAS

- + Super Jumbo Options for glass
- + External Cover Caps are possible
- + Stainless Steel Material in lieu of Painted Steel





OUR OFFICES IN COLMAR

Our Colmar Offices are located between Philadelphia and New York. We have 30,000 sqft. of space for pre-assembly and storage of key vital parts. We are able to provide a full service for repairs or replacement parts, as well as testing and QA inspection.



LOCATION / LOGISTICS

The assembly and preparation of the profiles takes place in our Logistics Center in Colmar, PA. We are able to deliver our system throughout the USA. The delivery is quality checked and packaged for road / rail transport.

Visualizations: © Lindner Group

This document and all contents are protected by copyright. All rights reserved. Copying or reproduction of partial content or the complete document in any form (print, photocopy or other methods) as well as the storage, processing, copying and distribution through any electronic media or systems, is prohibited for all parts of this document without the prior written approval of the publisher.

