

DYNATECT™

D Y N A M I C E Q U I P M E N T P R O T E C T I O N

Global Leaders in Dynamic Protection for Equipment and People



Bus Bellows

Anatomy & Components

*Dynatect designs and manufactures bus bellows
for both OEM and replacement applications*

Dynatect Bus Bellows Capabilities

- We are called Dynatect because of our expertise in Dynamic Protection – bus bellows that continuously flex and protect
- We manufacture drop-in replacements for Dynatect OEM bus bellows as well as OEM bus bellows from other manufacturers
- Entire assemblies or components including the bellows, mounting clips, hip boots, floor, and false ceiling
- Get it fast – competitive lead times
- Easy Mounting - simple features and connection points between components that minimize replacement time



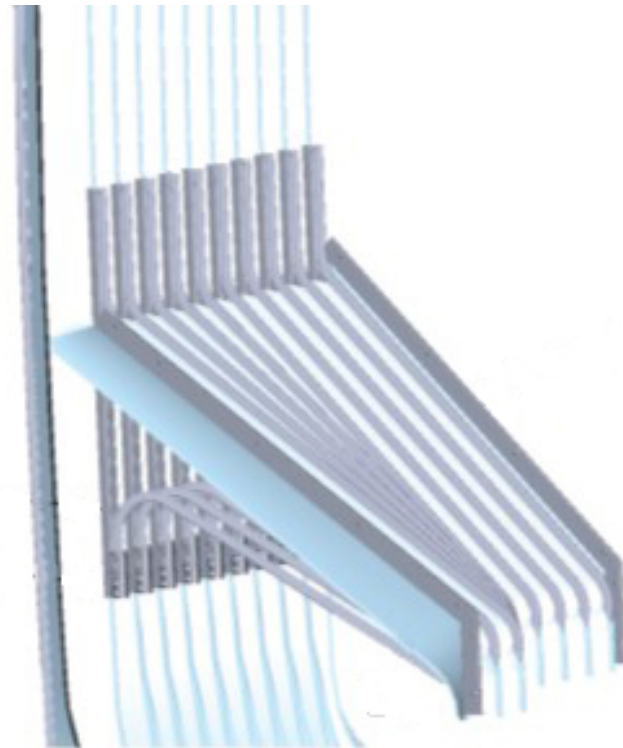
Engineering and Application Expertise

- Over 40 years experience in supplying articulation joint bellows to Bus OEMs, distributors, municipalities, and transit authorities
- Save on engineering costs – Dynatect will custom-engineer applications for you
- Engineering, technical sales, and manufacturing operations in the USA and Germany
- Over 30 full-time design engineers on staff
- Backward compatibility - can be customized for interchangeability with existing or new installation
- 4400-square-foot test area including computer controlled test stations supporting vertical, multi-axis, and 21-foot horizontal testing



Designed for Challenging Environments

- Constructed of aluminum extrusions shaped to provide structure and strength to a variety of materials including durable, elastomer-coated fabrics
- Materials selected to conform with these challenging environmental conditions and regulatory requirements:
 - Harsh weather
 - Withstand continuous flexing
 - Light debris
 - Fire retardant requirements
 - UV exposure
- Longer life and low maintenance



Manufacturing Experience

Since the early 70's, Dynatect has supplied OEM and replacement units to numerous transit authorities and bus manufactures throughout North America.

Bus Bellows:

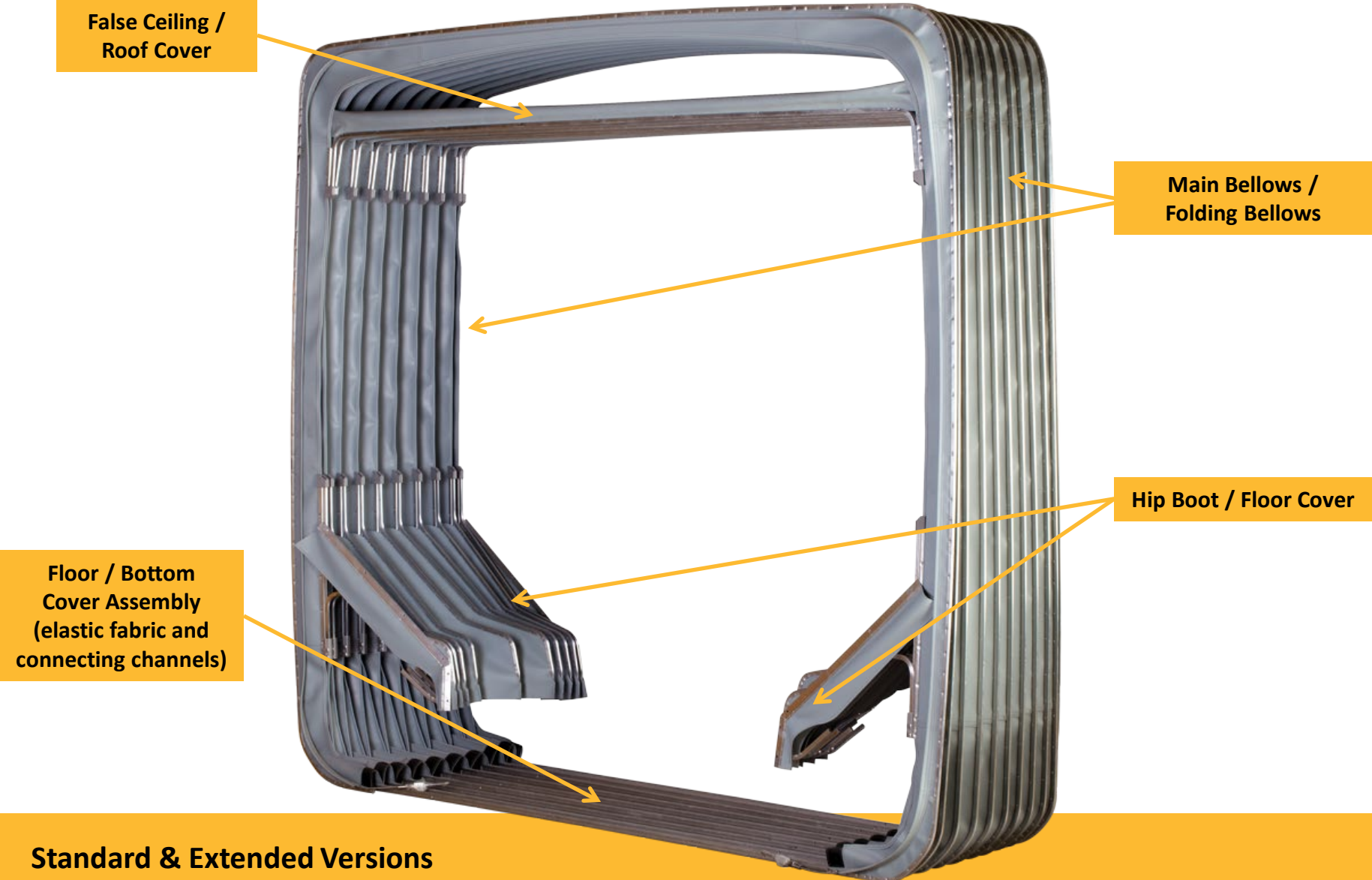
- New Flyer OEM High Floor
- New Flyer OEM Low Floor
- NABI OEM High Floor
- MCI OEM High Floor
- Breda OEM High Floor
- Prevost OEM High Floor
- Replacements for MAN, New Flyer, MCI, NABI

Rail Bellows:

- Amtrak OEM Diaphragms
- Siemens Transportation OEM Light Rail
- Bombardier OEM Monorail



Bus Bellows Anatomy

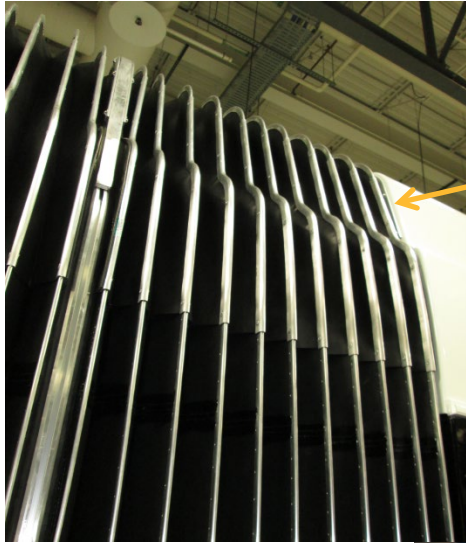


Standard & Extended Versions

Bus Bellows Anatomy: Extensions & Roof Cap

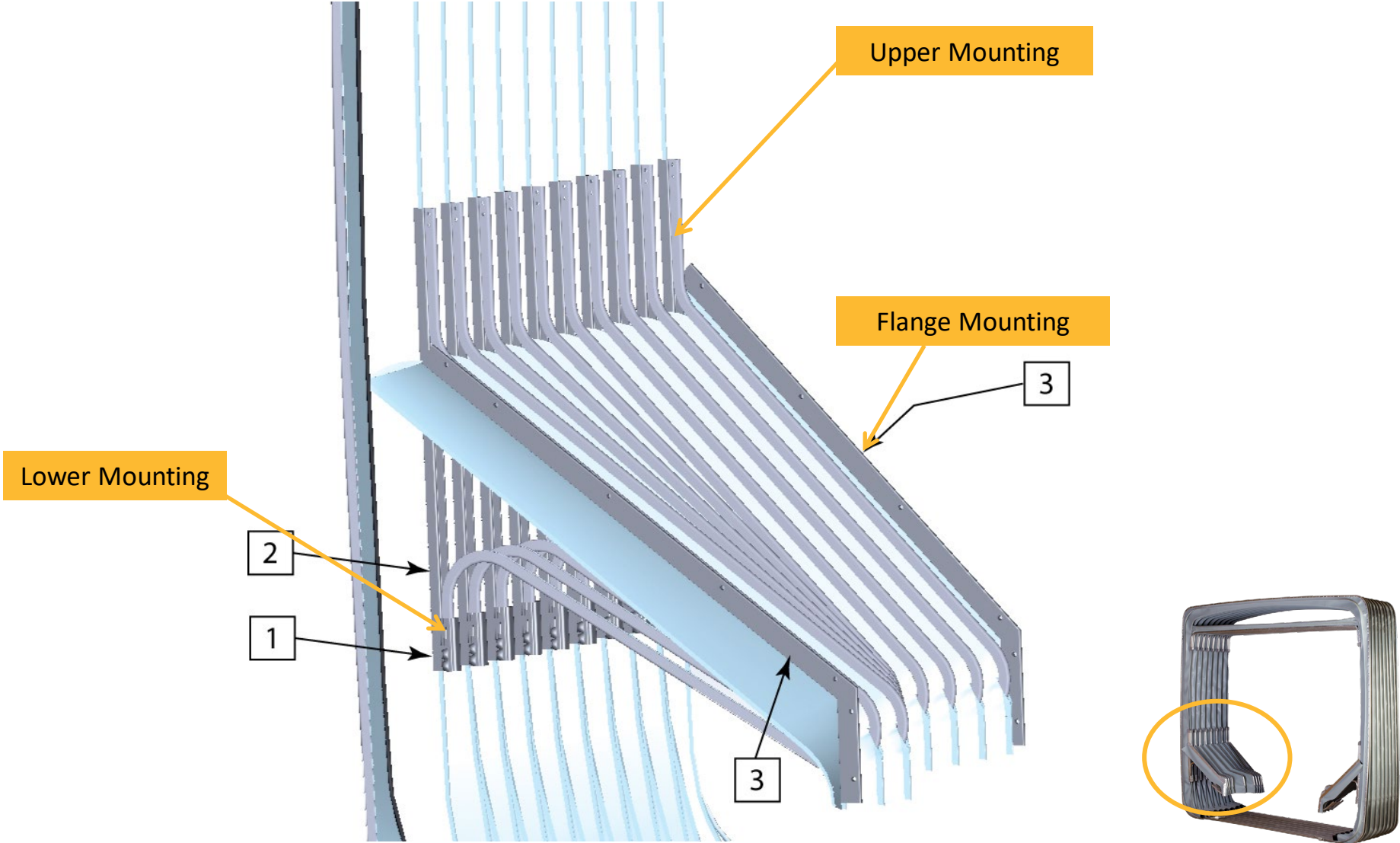
Side extensions are added to the top of the bus to cover CNG tanks or batteries. Bellows are extended up to provide a uniform side-view of the bus

**Bellows
Extensions**



Roof cap would be an additional accessory fully covering power/other cables passing on roof through articulation to protect the cables (not pictured).

Bus Bellows Anatomy: Hip Boot Overview



Bus Bellows Anatomy: Upper Hip Boot Mounting

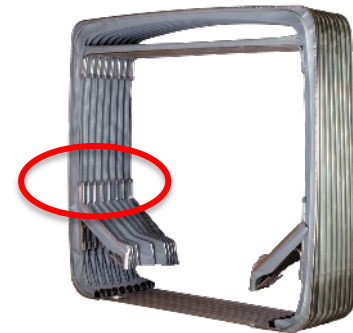


Mounting with Folding Clip



Mounting with Solid Clip

- Tongue in groove extrusion mounting
- Two different designs shown and available - folding or solid plastic clip



Bus Bellows Anatomy: Lower Hip Boot Mounting



Extruded Aluminum Channel



Solid plastic clip



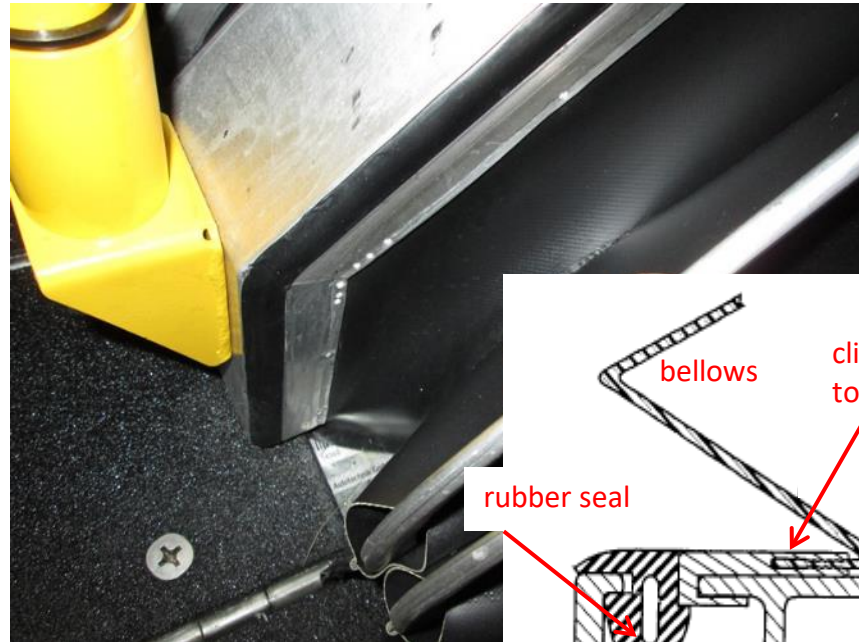
- Tongue and groove mounting in fastener-free pocket
- Two different designs shown and available



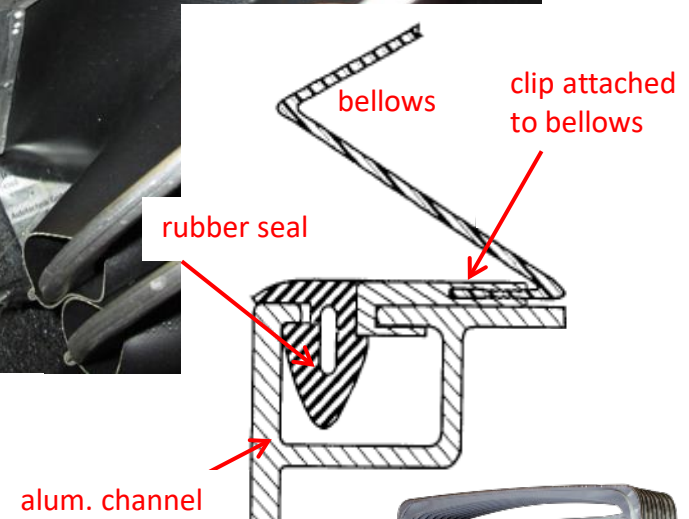
Bus Bellows Anatomy: Hip Boot Flange Mounting



Flat Bar Extrusion



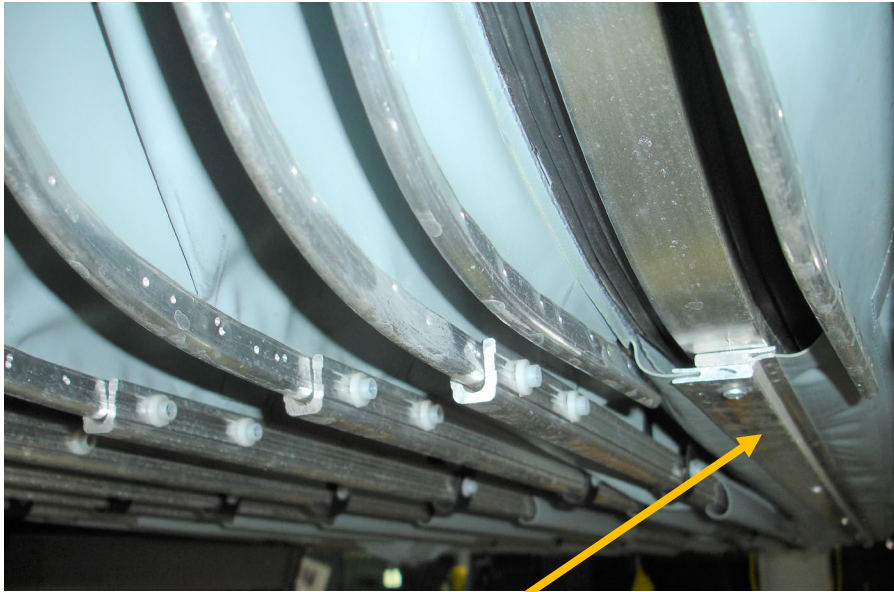
Channel Mount



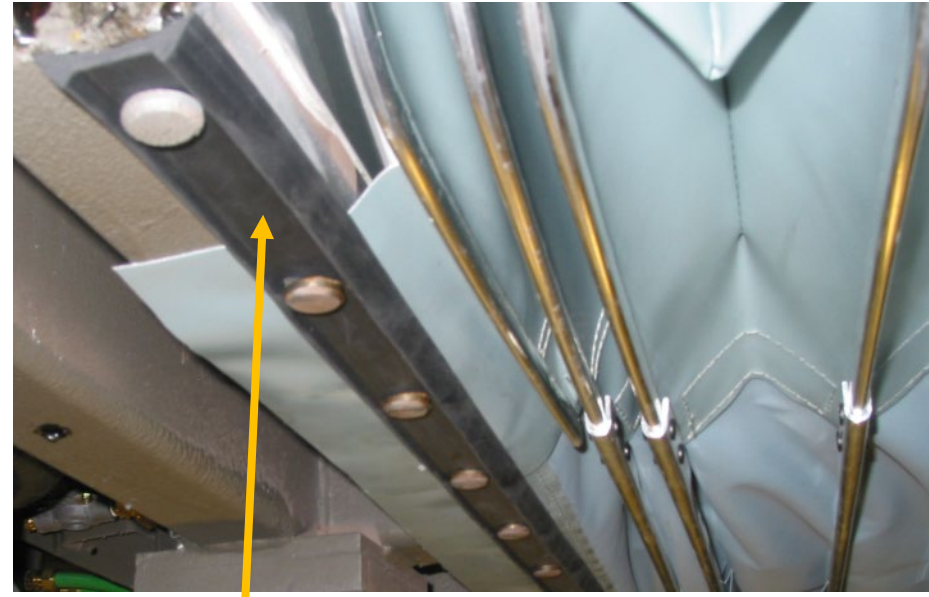
- Mounting flange – channel mount with rubber retainer or flat bar extrusion
- Two different designs shown and available



Bus Bellows Anatomy: Floor Flange Mounting



Extruded aluminum flange mounting strip

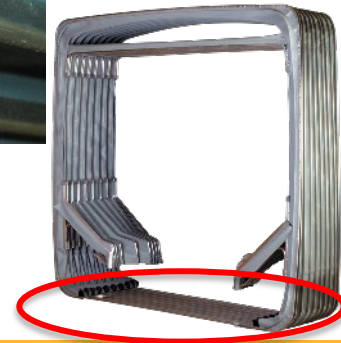
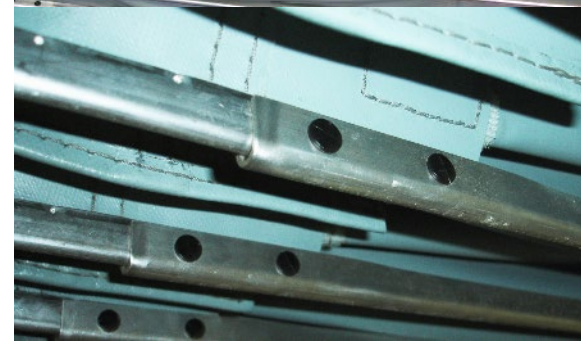
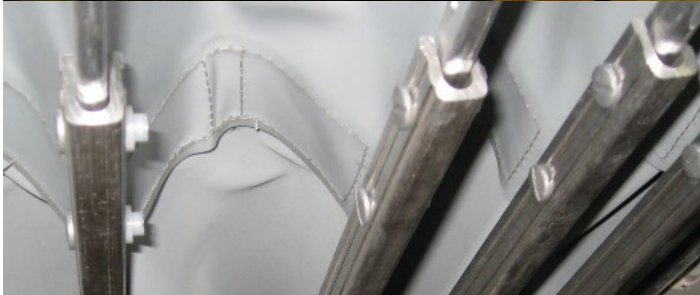


Flange mounting with buttons and rubber capture strip



Two different designs shown and available

Bus Bellows Anatomy: Floor/Bellows Attachment



- Floors are attached to bellows with hook & loop
- Frames are connected with extruded aluminum u-channel
- Two different designs shown and available

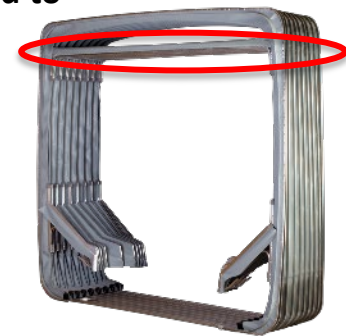
Bus Bellows Anatomy: False Ceiling



**False ceiling mount
with folding plastic clip**

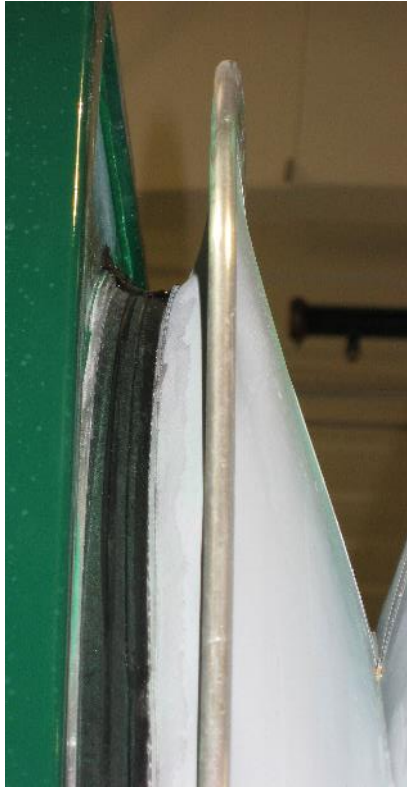


**False ceiling mount
with solid plastic
clip screwed to
support
extrusion**

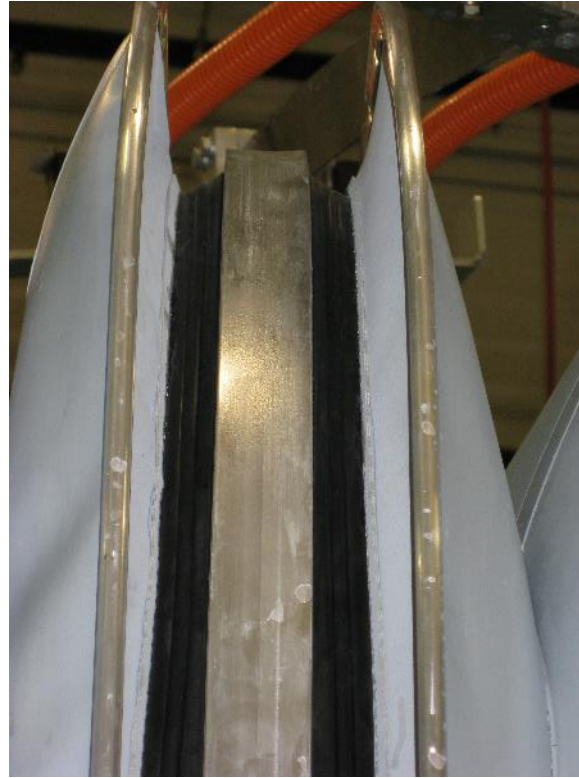


- Bellows have mounted tongue extrusion
- Identical to hip boot upper mounting, the false ceiling mounts within a tongue and groove arrangement using either folding or solid plastic clip
- Two different designs shown and available

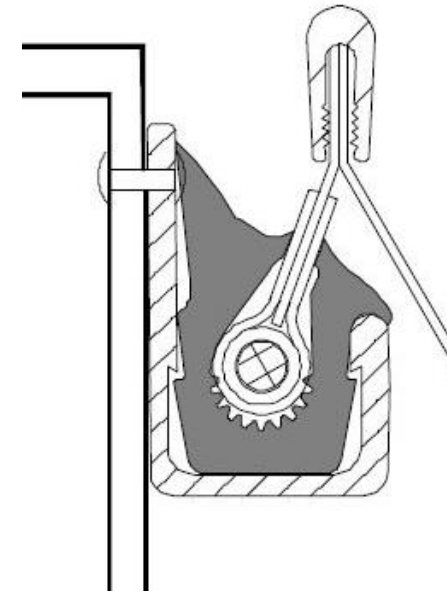
Bus Bellows Anatomy: Bellows Mounting Seal



Bulkhead Mount



Center Hoop Mount



Cross Section

- Rubber Bellows Mounting Seal installed at the factory
- Secures and seals bellows into existing aluminum mounting channel

