

QUICK REFERENCE GUIDE FOR

Utilizing Head Receptors in Storefront Glazing Systems

Introduction

This quick reference guide compiles essential insights and technical advice from JEI, Tubelite, and Anchor Engineering on the use of head receptors in storefront glazing systems. It aims to serve as a handy tool for architects, engineers, and glazing contractors, providing clear guidelines and best practices for incorporating head receptors to enhance system performance and longevity.

General Guidelines

Purpose of Head Receptors:

- To allow for relative movement between the storefront frame and the building wall, accommodating thermal expansion, live load and dead load deflection, and seismic movements.

Benefits:

- Eases and makes sealing more reliable.
- Reduces the frequency of resealing.
- Speeds up installation by pre-setting anchors and perimeter seals.

Rule of Thumb for Use:

- Whenever building movement and/or thermal expansion add up to anything greater than $\frac{1}{8}$ " of an inch - a head receptor is required.

Specific Recommendations

Vertical Thermal Expansion Calculation:

- Use the general rule of thumb of $\frac{1}{8}$ " of movement for a 100 degree temperature swing over 10'-0" of material.
- Consider head receptors for any span over 10'

Steel Construction Consideration:

- For runs over 15 feet in width, anticipate live load deflection exceeding $\frac{1}{8}$ " requiring head receptors.
- Consult the project's structural engineer early for specific deflection data.

Load Capacity and Deflection:

- Consult with an engineer to review the loading of your storefront system as head receptors are limited to what they can accommodate.

Door Frames:

- Avoid using head receptors for securing door frames. Prefer direct anchoring to the building structure.

Curtainwall Systems:

- Head receptors are considered cosmetic and not for structural anchoring in curtainwall systems.