

CURTAIN WALL SPECIFICATIONS

EAP Series 130, 135, 130HP and 135HP Curtain Wall Systems

General

All curtain wall components shall be manufactured and engineered by Engineered Aluminum Products (EAP). Profiles to be based on series 130, 135, 130HP or 135HP curtain wall systems (Architect to specify). Shop drawings and engineered details to be submitted and approved prior to commencement of fabrication.

Material

All aluminum sections shall be aluminum extrusions of 6063 alloy with temper as engineered by manufacturer. All screws, fastening devices, and other components shall be of corrosion resistant material and engineered to perform as intended and sustain imposed loads. Screws subject to corrosion shall be of stainless steel type 304 or double cadmium plated steel. Supporting angles, plates, and accessories of structural steel, shop painted with zinc chromate primer. Aluminum sheet shall be of suitable quality and alloy for the specified finish. Insulated back-up panels shall be of galvanized steel of adequate thickness (typically 20 or 22 gauge) with sealed corners and insulation (minimum 48 kg/m³ density) to specified thickness or R-Value. Insulation firmly held in place by welded pins. All gaskets, interior and exterior, shall be EPDM, neoprene, santoprene, or silicone as required by EAP and keyed to fit the pressure plate and back section and held in compression. Spacers, setting blocks and shims are of appropriate compatible material, length and hardness to suit the intended purpose. The keyed thermal break material shall be PVC. The 130HP and 135HP series shall use an aluminum or fibreglass pressure plate and/or an additional thermal break using a glass fiber reinforced nylon extruded profile (technoform I-strut or equal). Glass as selected by the Architect.

Finish

All exposed surfaces shall be finished to Aluminum Association Standards and either:

- a) Anodized AAC22Axx
- b) Fluoropolymer Kynar 500 or Hylar 5000 (eg. PPG Duranar or Duranar XL®)
- c) Duracron or other comparable finishes

Design

EAP curtain wall systems shall be designed on the rain screen principle with internal weep drainage and pressure equalization for no water infiltration and limited air infiltration or exfiltration. Fabrication shall take place in EAP or an EAP approved plant to maintain the highest quality standards. Anchoring details shall provide for adequate adjustment and compensate for building and thermal movements. Frame profile selection to meet all loading requirements and applicable building codes. Provision shall be made within the system for adequate retention, structural support, and thermal movement of the glazing. Curtain wall systems by EAP shall be tested and have passed the following standards:

- Static Pressure Air Infiltration (ASTM E283)
- Static Pressure Air Exfiltration (ASTM E283)
- Static Pressure Water Infiltration (ASTM E331)
- Structural Loading (ASTM E330)
- Thermal Performance testing and simulations including 63-GP-12M

The HP series have been designed for improved thermal performance. Please contact our office for simulations or test results.

Options

EAP curtain wall systems are designed to incorporate additional glazing system components including doors, sloped glazing, sliding fronts, windows and vents.

Installation

Installation shall be by experienced technicians to EAP's approval, instructions and site inspection to the highest quality standards. Installation must adhere to EAP's engineering and shop drawings. Components that contact dissimilar materials shall receive a protective coating.

Guarantee

The curtain wall system shall be guaranteed to be free from defective materials and installation deficiencies for a period of one year from the date of substantial completion, or as otherwise previously agreed to.

Technical Assistance

EAP provides engineering expertise for individual projects to help meet your design requirements including many custom extrusions and solutions. Our engineering department is available for consultation at any stage of the project. Contact our office for our full catalogue.

EAP Head Office and Manufacturing Plant:

3620 Blackburn Road S.E. Calgary, Alberta, Canada T2G 4A5 Ph: (403) 287-4480 Fx: (403) 243-2198 Internet: www.ferguson.ca

