ABOUT HANDI-HUT BUS STOP SHELTERS: The following are the technical specifications of a Handi-Hut shelter - the design and fabrication of bus stop shelters, including frame, glazed wall panels, glazed roof and benches if required. Should you have further questions about our bus stop shelters, please send us an e-mail, request a quote, or call us at 1-800-614-1800.

DESIGN REQUIREMENTS: Each bus stop shelter shall consist of a structural aluminum frame with glazed rear, side walls, smoking shelter, passenger shelter, sidewalk shelter, entry canopy windscreen if required and glazed domed roof. The walls shall be glazed full height with 10" ventilation space at bottom. Benches shall be furnished as indicated. The shelter shall be fabricated in the minimum number of parts or sections which can be transported to each site in their preglazed sections. Fabrication methods shall provide for ease in erection. The frame shall be designed to be stable with or without wall glazing and plastic roof domes. The bus stop canopy, including connections, components and anchorage, shall be capable of withstanding a wind load minimum of 75 MPH. The roof including the dome shall be capable of supporting a uniformly distributed load minimum of 40 pounds per square foot or a separate concentrated load of 200 pounds placed at any location on the roof or fascia without permanent deformation.

ALUMINUM: All structural and framing members including the fascia shall be extruded aluminum of 6063-T52 alloy not less than 1/8 inch in thickness.

GLAZING: All wall and roof glazing shall be 1/4 inch thick. Wall panels shall be tempered glass, acrylic, coated polycarbonate or stainless steel wire mesh (as specified). Roof domes shall be thermo formed white translucent acrylic, 1/4 inch thick. Barrel roof shall be glazed with twin- wall polycarbonate. Gasketing around windows and domes shall be extruded PVC dry set splines, which shall be black in color. Hot or cold poured sealants will not be permitted.

SHELTER CONSTRUCTION: Maximum horizontal span of any panel shall not exceed 27.

All bus stop shelter wall panels shall be factory glazed into aluminum sub-frames with minimum depth engagement of 3/4. Panel sub-frames shall be attached to vertical and horizontal structural mullions with 3/16 diameter rivets on approximately 13" centers.

Each shelter shall be supported by four vertical 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " aluminum tube corner multions anchored at base and supporting the roof, rear wall and side walls. Intermediate vertical multions shall be 2 $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " aluminum tubing.

Mullion connections shall be by means of extruded aluminum U channels $2\frac{1}{4}$ x $2\frac{1}{4}$ or $1\frac{1}{4}$ x $2\frac{1}{4}$ with tapered edges.

All wall sections shall have structural horizontal members along top and bottom edges. smoking shelter, passenger shelter, sidewalk shelter, entry canopy. Horizontal and vertical mullions shall be factory attached directly to each other. The fasteners shall be completely hidden when shelter is field installed. The final assembly shall provide a clean, neat, unobtrusive and tamperproof structure free of sharp or irregular edges or corners. Anchor flanges shall be aluminum with minimum height of 5" to provide up to 3" vertical adjustment for possible unlevel site conditions. All mounting hardware for bus stop shelters shall be factory supplied.

Roof shall be completely assembled if roof is no larger than 15' long by 7'-6" deep. Roof domes shall be factory glazed 1 $\frac{1}{4}$ " deep all around. Roof fascia shall be 1/8" extruded aluminum 6" high. Fascia shall incorporate an integral gutter with 5/8" x 1 $\frac{1}{4}$ " deep holes in back of shelter for drainage.

Roof fascia shall have both corner keys and alignment plates secured with 3/16" diameter rivets. Under no circumstances will corner keys be dependent upon mere pressure fit. Each corner key shall be secured with a total of six rivets, three on each face, through both the roof fascia and corner key. Rivet shall match the finish of roof fascia.

The roof fascia extrusion shall have an inside lip facing downward which shall overlap the inside surface of the wall assembly. This lip shall have factory drilled clearance holes for factory supplied 3/16" diameter rivets on 20" centers. Through these holes, holes shall be chased into the top horizontal wall mullion in the field, then the roof assembly secured to the wall assembly with the factory supplied rivets. Any subsequent upward wind load force under the roof shall be resisted by shear strength of the rivets in the transit shelter. The roof assembly shall not be fastened down to the top of the wall sections with sheet metal screws whereby any upward force is resisted by the screw threads in tension.

FINISH: All aluminum components shall be either one of the following finishes, depending which is specified:

Clear anodize AMM10C22A21204R1

Dark bronze 313AMM10C22A44 hard coat anodic film

Painted finish

BENCH/BACKREST: If bench/backrest is specified, materials shall be extruded aluminum consisting of two contoured sections for bench and one section for backrest. Included shall be aluminum brackets and hardware. Bench/backrest shall be supported along inside for shelter rear wall.

WARRANTY: Bus stop shelters shall be guaranteed against any defects in material and/or workmanship for one full year from time of delivery.