

## TECHNICAL SPECIFICATIONS

### MONARCH™ DOUBLE HUNG VINYL REPLACEMENT WINDOW SYSTEM

#### GENERAL:

Windows shall be Monarch™ Double Hung as manufactured by Lockheed Window Corp., Route 100, Pascoag, Rhode Island. Individual double hung windows and integral mullion twin double hung windows shall meet or exceed AAMA/WDMA/CSA 101/I.S.-2/A440-11, *NAFS*, LC-PG50, as required.

#### MATERIAL:

All master frame and sash profiles shall be of impact modified, UV stabilized, heavy wall, multi-chambered polyvinyl chloride (PVC) extrusions. All fasteners shall be hardened stainless steel in accordance with American Architectural Manufacturers Association specifications (AAMA). Ancillary components shall be of materials consistent with application and compatible with PVC.

#### MASTER FRAME:

All master frame profiles shall have .072" walls and shall be constructed of multi-chambered vinyl extrusions, fusion welded at each corner. Corner welds shall be cleaned to leave the exposed surfaces free from burrs or blemishes. The master frame shall be supplied with a vinyl "U" channel header expander and an aluminum sill angle to provide for "custom sizing" the height within the opening. The master frame head shall have one (1) row of fin seal weather-stripping located in the interior leg of the upper sash pocket. The master frame sill shall have a 7° compound cut sloped design and shall have two independent sill seals when the lower sash is in a closed and locked position. Two (2) "wafer head" screw type jamb adjusters shall be located near the mid point of each master frame jamb which when activated is designed to provide uniform pressure on the rough opening to compensate for the "squaring" of the master frame within the rough opening. The exterior sill of the master frame shall contain two (2) color matched baffled nylon weeps located approximately four (4) inches from each end.

The connection between the four (4) block and tackle balances ((8) for twin units and (12) for triple units) shall be designed so that both sash tilt-in and can be readily removed from the window if required.

The upper half of both master frame jambs (for the lower sash only) shall contain "snap in" balance covers. This cover provides protection to the balance tube as well as providing a neat finished appearance.

#### INTEGRAL MULLION (If applicable):

Integral mullion profile shall have .072" walls and shall be constructed of multi-chambered vinyl. Each mullion shall be securely fastened at the head and sill with (4) stainless steel screws. Each screw shall be securely fastened through a 1/16" x 2 5/8" x 5" galvanized steel plate to allow for structural integrity of both the head and sill main frame. Each mullion head and sill shall be notched and milled to allow for head and sill main frame profiles to be continuous throughout. The exterior sill of the master frame shall contain (2) color matched baffled nylon weeps located approximately (3 1/2") inches from the mullion center point. Each mullion shall have a 1/16" closed cell foam self adhered white gasket applied between the coped sill end and the main frame sill to allow for premium air and water resistance.

#### SASH:

All sash profiles shall have .072" walls and shall be constructed of multi-chambered, vinyl extrusions, fusion welded at each corner. Corner welds shall be cleaned to leave the exposed surfaces free of burrs and blemishes.

The exterior perimeter of the sash shall receive a glazing bead containing two (2), coextruded flexible vinyl fins, which when applied, shall provide a positive seal between the insulating glass unit and the sash assembly.

Each sash shall travel in its own track, and all vertical members shall be double weather-stripped. At both horizontal meeting rails, an integral mechanical interlock shall be provided on each profile in addition to fin seal weather-stripping on each of these horizontal profiles.

The top horizontal of the upper sash and bottom horizontal of the lower sash shall have integrally extruded lift and pull handles to provide easy sash operation.

The bottom horizontal keeper rail of the upper sash and the bottom horizontal lift handle of the lower sash shall contain two (2), one on either side; "one piece" zinc die cast pivot true pivot bars, attached with two (2) stainless steel screws. The pivot true pivot bars shall travel in their respective tracks of the master frame jambs to insure proper master frame jamb and sash alignment.

Each sash shall have two (2) recessed spring loaded nylon color matched tilt sash locks located on each sash top horizontal rail which when engaged will travel in their respective master frame jamb tracks.

**HARDWARE:**

The lower sash horizontal meeting rail shall have applied to it one (1) or more high quality, color matched zinc die cast sweep cam latch low profile sash lock (s), which shall engage in one (1) or more corresponding zinc die cast keeper(s) that shall be applied to the upper sash horizontal meeting rail. Each master frame jamb sash pocket shall be furnished with two (2) block and tackle balances designed to provide perfectly balanced sash. Both vertical upper sash stiles shall each be furnished with a nylon limit vent lock which when engaged will limit the travel of the lower sash to approximately 2".

**FINISH:**

All vinyl profiles to be White, Almond or Territone throughout.

**GLAZING:**

Both sashes shall be exterior glazed using sealed insulating glass with an adhesive glazing tape or equivalent bedding and a rigid vinyl glazing bead. Glass shall be set with neoprene glazing blocks to maintain uniformity around the glass perimeter.

Standard glazing shall be nominal 13/16" thick sealed insulating glass consisting of two pieces of SSB clear float glass (double glazed). Optional glazing shall be nominal 13/16" thick sealed insulating glass consisting of one piece of SSB clear float glass and one piece of SSB low "E" glass. Optional argon gas filled sealed insulating glass units are also available. All insulating glass units come standard with Technoform TGI® warm edge IG spacer.

**SCREENS:**

All double hung windows shall be furnished with one (1) half height insect screen which shall be of hollow extruded aluminum, color matched to the window. Screen cloth shall be black fiberglass 18 x 16 mesh wire. Screens shall travel in a separate extruded vinyl channel integral within the master frame profile. Each screen insert shall have two (2), color matched injection molded nylon spring loaded locks, on each side of the lower horizontal hand rail. Screen extrusion corners shall be mitered and contain one (1), zinc die cast corner key per corner that shall be mechanically stacked to securely hold the screen together. Top and bottom horizontal rails shall have single row high density pile weather stripping bug stop. Optional full height insect screen with same features described above are also available.

**INSTALLATION BY OTHERS:**

Window frames shall be installed straight, plumb, level, square, and securely anchored, in accordance with manufacturer's recommendations and details – see instructions on each window.

**WARRANTIES:**

See manufacturer's separate warranty.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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