

TYPICAL SPECIFICATIONS FOR STOP LOGS

GENERAL

The stop logs assemblies shall be as specified herein and will be engineered and manufactured to the application. The stop logs and channels shall be dimensionally as shown on the equipment submittal concerning size, hardware number, type and location.

Leakage shall not exceed 0.05 GPM/ft of wetted seal perimeter when the stop logs and the frame are configured with the vertical seals as single pieces extending from the invert to the top of the frame channel.

Stop logs shall be provided with a resilient seal along the bottom edge or edges of the log as needed for single-direction or bi-directional sealing.

Stop logs shall not require additional weighting to seat properly and shall seat properly regardless of stacking order.

FRAME AND GUIDES

The frame and guides shall consist of rigid sub-units composed of extruded aluminum or formed stainless steel construction that shall be mechanically assembled to form a single rigid unit at installation.

The frame and guide bearing surfaces shall consist of minimum ¼ inch material. Mounting type shall be either embedded in channel walls, surface mounted to channel walls or surface mounted to channel end wall. Mounting style shall be as shown on submittal drawings.

A flush-bottom type invert member shall be provided between vertical channel rails.

STOP LOGS

Stop logs shall be constructed of extruded aluminum shapes tempered to the latest revision of the ASTM B 221/B 209 standard for the 6061-T6 alloy, or fabricated of stainless steel produced to the latest revision of the ASTM A 240/A 276 standard for either the AISI type 304, 304L, 316, 316L or 2205. Log bending stress level shall not exceed ¼ of the minimum material yield strength for the aluminum material and ½ of the minimum material yield strength for the stainless steel material. Deflection shall not exceed 1/360 of span under full design head for either material.

Stop logs shall not retain water and shall be self-draining.

Stop log hardware will interface with the log lifter for removal and installation of logs in frame work. Stop logs shall be fitted with UHMWPE guide pads to reduce contact frictional load with the frame and guides as well as to provide protection and retention for the resilient seals.

LOG LIFTER

Log lifters shall be fabricated of either mild steel (painted), aluminum or stainless steel, per project specification. The log lifters shall have UHMW guides that allow these assemblies to glide easily in the log channel. The log lifters shall be fitted with lifting eyes for attachment of lifting cables. Log lifters shall be fitted with pivoted hooks that readily and automatically engage the stop log for removal and stay engaged until manually released at log installation or for storage.

SEALS

Stop logs shall be fitted with a resilient seal set option per the application. The stop log can be fitted with seals on both vertical edges and the bottom edge, or can be fitted with a seal along the bottom edge and have the vertical seals fitted to the frame.

Seals shall be mechanically attached or mechanically retained to the stop log or stop log frame and shall have features that are enhanced by water head and log weight.

MATERIALS

Frame, Stop Logs, Log lifter

Aluminum - ASTM B 209, ASTM B 221, Alloy 6061-T6

Stainless Steel – ASTM A 240, ASTM A 276, AISI Type 304, 304L, 316, 316L or 2205 Duplex, as specified.

Mild steel – ASTM A 36

Fasteners and Anchor Bolts

Stainless Steel – ASTM F 593 and F 594, AISI Type 304CW, 316 CW or UNS-S32205 Duplex 2205, as specified.

Flush bottom and Vertical seals

Neoprene Rubber – ASTM D 2000 BC 615/625 Grade BE 625.

Log Guides

Ultra High Molecular Weight Polyethylene (UHMW).

Finish

Mill finish on all aluminum and stainless steel surfaces. Mild steel to be blasted clean and finished as specified.

LOGS IN FRAME

