# ALFA LAVAL, INC.

## **COMPOSITE**

RECTANGULAR FLAP VALVES: RIGID TYPE

#### Construction

<u>Flap</u>: Constructed from Composite materials internally reinforced with steel members.

<u>Frame</u>: Carbon steel fabrication that is sandblasted, flame zinc sprayed, primed and epoxy coated (standard color gray). Stainless steel frames are available.

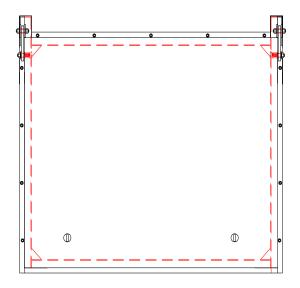
<u>Seal</u>: Each Composite flap valve is fitted with a sensitive type flap seal. It is fixed to the frame by means of a retaining plate using stainless steel hardware.

Hinge: Double hung arrangement stainless steel links, pins and brackets with bronze bushings. Composite rectangular flap valves are available in any size or configuration.

Specifically designed to prevent reverse flow of water into a line, Composite flap valves are suitable for use on pipelines, sewers, land drainage outfalls or headwalls. In waterworks. sewage and industrial effluent treatment works, they generally employed at finaleffluent outfalls to prevent back flow of floodwaters or on the ends of washout lines. Apart from being unaffected by most chemical actions, Composite materials inhibit algae and marine growth.

#### **Operating Conditions**

When considering the location of the flap valve, it is important to remember that a distance of no less than half of the flap valve depth should be maintained from the invert to the floor. This will help in reducing the possibility of any objects becoming wedged between the





flap and the frame. It is also important to consider the distance between the edges of the valve to the side wall. This will reduce the turbulence around the valve that could cause damage to the flap or the seals. If these parameters cannot be obtained, a slope or trough should be built in to help ease the burden of trash buildup and turbulence. If these are not possible, the solution may be to use an Alfa Laval flexible flap valve.

#### **Pressure Head**

Each Composite rectangular flap valve is designed to meet your specific head requirements. An important factor to consider on all applications is the ability of the equipment to sustain "a working head of liquid". "Seating" pressure refers to a flow that tends to push the flap onto its seat on the frame.

Fasteners: stainless steel.

### **Installation**

Heavy-duty anchor bolts are supplied with all Composite wall-mounting flap valves; their cost is included in the price. Placing a flap valve in position on the wall, holes are simply marked off through the holes in the mounting angle at each side of the frame and then drilled and anchor bolts are inserted and tightened.

Detailed installation instructions accompany each order.