



**Rubber Flap Gate — Section View**

## Specification for Flexible (Rubber) Flap Gate

Flexible flap gates shall be of size and material grades as specified herein and as shown on drawings and gate schedule. They shall be Hydro Gate Flexible Flap Gate or approved equal. They shall be square or rectangular or multiple opening style.

### Frame

Frame shall be fabricated from stainless steel type 304. The frame shall have a diverging face top to bottom to assist in positive closure of the flap. The frame shall be provided with a rear attaching flange, holes to mount, and a concrete structure with a grout pad. Two lifting lugs shall be provided on the frame for handling and installation hanging.

### Cover (Flap)

The cover shall be fabricated from fabric reinforced neoprene rubber and type 304 stainless steel reinforcing angles attached to the rubber sheet with stainless steel through bolts and backing bars. The bolts shall be caulked or sealed to prevent leakage through the boltholes. The size and quantity of reinforcing beams shall be designed to withstand the maximum hydrostatic force applied to the gate. The hinge end of the cover shall be securely bolted to the frame with heaving clamping bars and bolts.

The rubber cover sheet shall be one piece without seams. The rubber thickness shall be sufficient to prevent excessive “ballooning” under hydrostatic pressure. Gate widths greater than available rubber sheet shall be furnished with multiple (side by side) openings.

The flap cover shall have a lifting lug at its lower end to facilitate lifting for cleaning.

### Hinge

The hinge shall be flexible type integral with the flexible rubber cover.

### Seating Surfaces

Resilient hollow section or lip type rubber seals shall be attached to the divergent face of the gate frame with bolts and stainless steel retainer bars. The resilient seals shall provide a high degree of water tightness.

### Limitations

Hydro Gate wants to be sure that flexible flap gates will meet the requirements of the project. Before specifying gates wider than 60” and head pressures more than twice the gate height, contact Hydro Gate Engineering Department for design and material limits. Provide information about the type of service, type of water, maximum seating heads and mounting information.

Gate Schedule				
Quantity Required	Size of Opening (In.)	Back Type	Seating Head (Ft)	Remarks