CAST IRON
INTEGRAL FRAME SLIDE GATES

SERIES: A-103

NON SELF-CONTAINED SLIDE GATE

SPECIFICATION

These slide gates are made in full compliance with IS 13349 / BS 7775 / AWWA C560.

APPLICATION

These slide gates are directly mounted on the face of the wall and are used to isolate flow in and out of a conduit. This design can be used for 18 m seating and 9 m unseating head application for gates sizes up to 2000 x 2000 mm .

FEATURES:

- Flange back frame suitable for directly mounting on face of wall using anchor fasteners and secondary grout between wall and frame or on wall thimble.
- Frame provided with square aperture for square as well as round opening in wall.
- The guides are integral to the frame with fixed wedges bolted to the machined pads on the guides.
- Short length / open top frame provided with short length extension guides sufficient to engage at least half the overall vertical height of slide / door when the gate is full open.
- Slide sufficiently ribbed to suit the applicable water head and designed to suit rising as we well as non rising stem requirement.
- Slide provided with integral pocket to house threaded stem connecting block connecting the slide with the stem.
- Non corroding metal to metal seating faces / strips on all the four sides for conventional bottom closing and on three sides for flush bottom closing slide gates.
- Flush bottom closing slide gates provided with frame mounted flush bottom seal flush with bottom invert of opening.
- Seating faces secured firmly in finished grooves of frame & slide.
- Slide mounted adjustable wedges in contact with frame mounted fixed wedges seats to ensure that metal seating faces mounted on frame and slide comes in close mating contact only at the verge of final closure to achieve the desired leakage performance.
- Adjustable wedges on slide to allow future on site adjustment of wedges to enable increased wedging action and compensate possible wear of seating faces.
- Slide gates subjected to seating head application are provided only with adjustable side wedges whereas gates subjected to unseating head application are provided with adjustable side as well as top & bottom wedges. Gates provided with flush bottom closure are not provided with bottom wedges.
- Rising stem with pedestal / yoke mounted manual gate operating mechanism to operate the slide gate with less than 18 kgs effort on the crank or handwheel.
- Single piece or multi piece stem to suit the installation depth, coupling to connect stem sections with the lowest stem section connecting to the stem block mounted on slide.
- Dual or tandem stem for all gates 1200 mm and wider, and having widths greater than twice their height.
- Stem guides and brackets to prevent buckling of stem.
- Anchor bolts with nuts and washers for frame, stem guide brackets and pedestal of lift mechanism.
- Offered with epoxy paint or as required by specifications.

OPTIONAL FEATURES:

- Square / Rectangular / Circular (Diameter) shaped wall thimble having section F, E or MJ as required.

- Oversized frame opening for slide gates to be mounted in front of a concrete pipe terminating at the face of the wall.
- Seizure free slide gate design by provision of liner in the guide groove and on tongue / jib of slide so that all contact surface are of non-corroding material.
- Self-contained / closed top gate frame with lift mechanism mounted directly on yoke provided across the top of gate frame.
- Non-rising stem.
- Electric / Pneumatic / Hydraulic operating arrangement.
- Portable electric or hydraulic operator.
- Foot wall bracket for pedestal mounting.
- Stem cover made of galvanized steel or transparent plastic tube.
- Gate position indicating arrangement.
- Low leakage, 25% of that permissible as per AWWA C560.

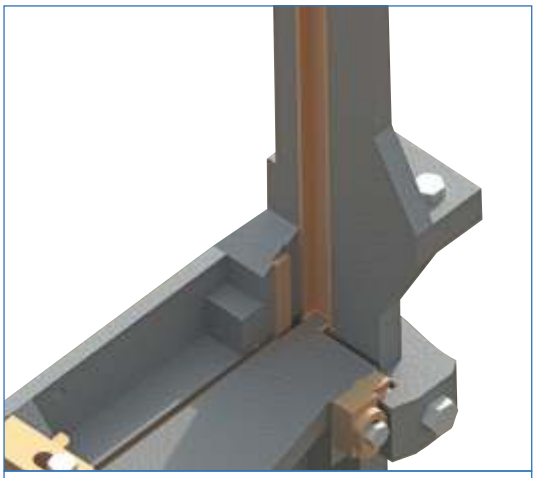
MATERIAL OF CONSTRUCTION:

Depending upon application and requirement, client should select and specify the material of construction option for various components of slide gate from the alternatives stated on page no. 39.

SHOP TESTING:

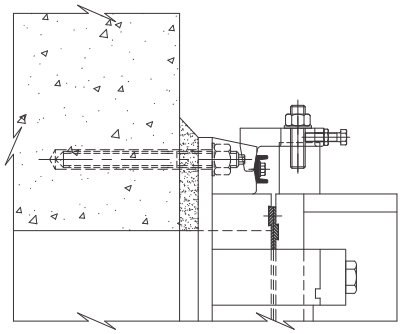
- Leakage testing of slide gate at plant at actual operating head to verify slide gate leakage performance meeting leakage requirement as specified or as given on page no. 43.
- Hydrostatic body test at 1.5 times the maximum operating head for structural soundness.
- Seat clearance check of each slide gate for clearance between mating sealing faces.
- Movement test for checking interference free movement of complete assembly.
- Torque test to verify gate operating torque for manually operated slide gates.

#For getting similar leakage result at site ensure that there is no frame distortion during the process of slide gate installation on wall.

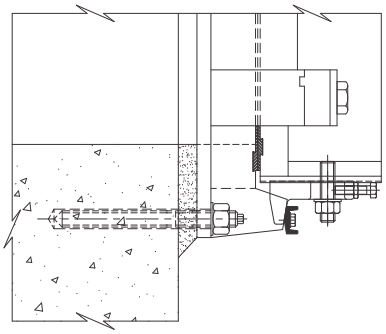


Liner Arrangement on Slide and Frame

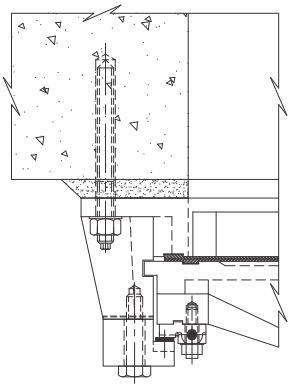
SEALING ARRANGEMENT



TOP SEALING ARRANGEMENT



BOTTOM SEALING ARRANGEMENT



SIDE SEALING ARRANGEMENT