

ALUMINUM OPEN CHANNEL SLIDE GATES

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OPEN CHANNEL SLIDE GATE



SPECIFICATION:

These open channel slide gates are made in compliance with AWWA C562.

APPLICATION:

These open channel slide gates are used to isolate flow within as well as in and out of an open channel. These are suitable for seating water head and are provided with sealing arrangement on 3 sides only and not on top side and so the height of water should always be less than the height of slide.

FEATURES:

- Frame design suitable for (i) embedment on two sides and bottom, or (ii) anchoring on two sides and bottom, or (iii) face wall mounting at the end of channel.
- Rigid extruded aluminum frame provided with low friction UHMWPE guides to prevent metal to metal rubbing and galling during slide operation.

- Gate frame provided with full length extension guides sufficient to engage full height of slide over the water height when the gate is open.
- Self-contained gate frame with lift mechanism mounted directly on yoke provided across the top of gate frame.
- Frame and slide made of 6 mm thick material as stipulated in AWWA C562.
- Side frame having dual slot design wherein primary slot engages with slide and secondary slot envelops the side reinforcing ribs of the slide.
- Portion of slide engaging in frame guides to have minimum 12 mm material thickness and 25 mm engagement depth.
- Slide sufficiently ribbed to ensure that deflection under designated water head does not result into leakage over the specified limit.
- Offered with either HARSA-DUO™ rigid sealing system having integral seal/seat or EASY-SLIDE™ resilient sealing system having seal separate from the seat. Type of sealing system offered depends upon client requirement and application.
- HARSA-DUO™ unique integral seal / seat system can withstand 25,000 cycle operation and reduce the possibility of future seal change. This sealing system offers longevity and necessitates precision in installation to achieve specified leakage criteria.
- HARSA-DUO™ rigid sealing system comprises of low friction, high abrasion resistant self-adjusting seals of UHMWPE fitted in dovetailed slots of frame with dual compression resilient cord seals to ensure forced contact between seal and both the faces of slide for bi-directional sealing.
- Flush bottom slide gates with HARSA-DUO™ rigid sealing system provided with bottom seal comprising of flexible rubber seal flush with the opening and having AUTO-FLUSH™ arrangement at guide bottom to force out accumulated grit particles and ensure full closure of the slide.
- EASY-SLIDE™ resilient sealing system have seal separate from the seat to ensure low operating torque and offer leakage limits substantially lesser than that stated in AWWA C562.
- EASY-SLIDE™ resilient sealing system comprises of replaceable resilient seal in forced contact with low friction, high abrasion resistant seat of UHMWPE to ensure reduced seal wear with uni-directional sealing.
- Flush bottom slide gates with slide mounted bottom resilient seal in forced contact with bottom invert flush with the opening.
- Seal fitment ensures that no dismounting of gate from its location is to be done for future seal replacement.

- 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.
- Dual or tandem stem for all gates 1200 mm and wider, and having widths greater than twice their height.
- Anchor bolts with nuts and washers for frame suitable for side anchoring or wall mounting.

OPTIONAL FEATURES:

- Bi-directional sealing arrangement in case of EASY-SLIDE™ resilient sealing system.
- Extended side guides in case operating thrust is to be taken on frame for gates where operating arrangement is located at more than 2.5 times the height of slide.
- Chain and sprocket arrangement to lower the handwheel / crank centerline to an elevation of 900 mm from the top of the operating floor in cases where manual operating arrangement is located more than 1500 mm distance from the operating floor. (Refer sketch on page no.22)
- Non self-contained gate frame with extended stem, couplings and stem guide brackets, as required, to connect the slide to the gate operating arrangement mounted on a remote operating floor.
- Non-rising stem.
- Electric/Pneumatic/Hydraulic operating arrangement.
- Portable electric or hydraulic gate operator.

- Stem cover made of galvanized steel or transparent plastic tube.
- Gate position indicating arrangement.
- Hard epoxy painting on aluminum material.

MATERIAL OF CONSTRUCTION:

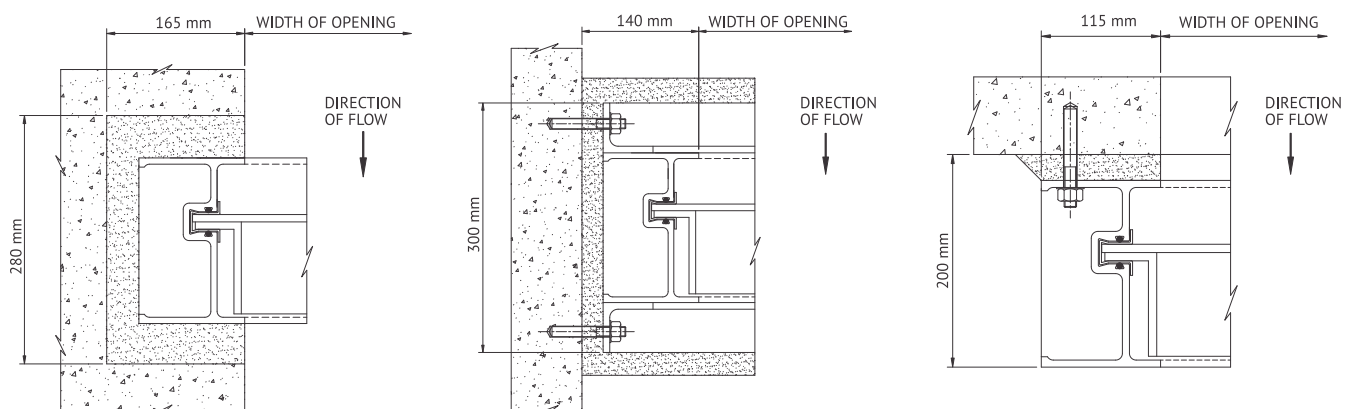
Depending upon application and requirement, client can select and specify the material of construction option for various components of slide gate from the alternatives stated on page no.53.

SHOP TESTING:

- Leakage testing of slide gate at plant with water filled till top of slide to verify slide gate leakage performance.#
- 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.

Shop leakage test will be carried out only when a test has been specifically agreed to or when a test is specifically stated in specifications.

HARSA-DUO™ RIGID SEALING ARRANGEMENT



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