

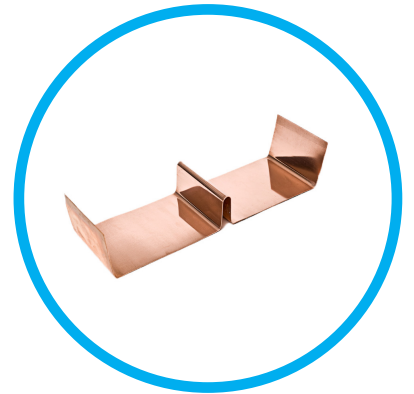
# HYDRO-STOP® COPPER and STAINLESS STEEL WATERSTOP



## PRODUCT DESCRIPTION

CJSA offers a range of Hydro-Stop® Copper and Stainless Steel Waterstops designed and manufactured from .9mm thick copper alloy or 316 Stainless Steel to AS1566 , AS1449/ASTMA240 international standards and specifications.

Hydro-Stop® Copper and Stainless Steel Waterstops are predominantly used in water retaining structures such as dams, which receive very high hydrostatic heads of water pressure against the joint and provide a very high grade of performance and give resistance to certain types of chemical attack due to their durability, integrity and strength.



Hydro-Stop® Waterstops are available in three standard types and sizes (refer to physical dimensions) with custom shapes and sizes formed to your requirements. A range of factory made and quality controlled intersections can also be provided to decrease the problems associated with manufacturing them on site, leaving straight welded joints for the field.



## AREAS OF APPLICATION

- Water Retaining Structures
- Dam & Hydro Structures
- Treatment Plants (Water & Sewage)

*Note: The products design and performance, its intended use, installation and final confirmation and approval for use, must be provided by the project's Design Engineer and Project Manager.*



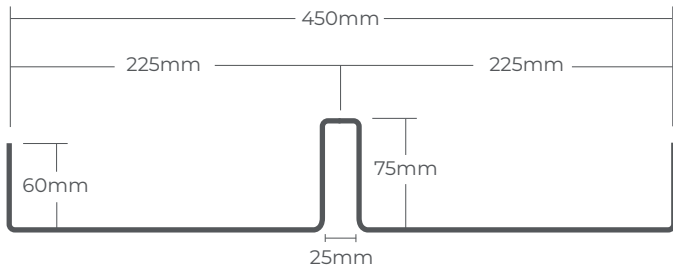
## PHYSICAL PROPERTIES

Stainless steel specifications attached separately.

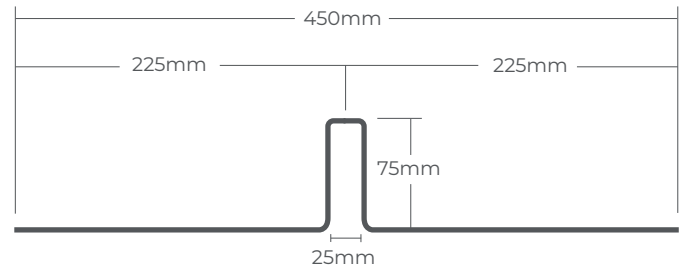
| PROPERTY                     | TEST METHOD   | UNIT  | REQUIREMENT   | RESULT   |
|------------------------------|---------------|-------|---------------|----------|
| Copper. Cu                   | JISH3100 2012 | %     | min. 99,90000 | 99,99480 |
| Min. Electrical Conductivity | JISH3100 2012 | %IACS | N/A           | > 98.16  |
| Tensile Strength Rm          | JISH3100 2012 | N/qmm | 245 - 315     | 265      |
| Yield Strength Rp0.2         | JISH3100 2012 | N/qmm | N/A           | 200      |
| Elongation A50mm             | JISH3100 2012 | %     | min 15        | 32       |
| Hardness HV                  | JISH3100 2012 |       | 75.0 - 120.0  | 81.5     |



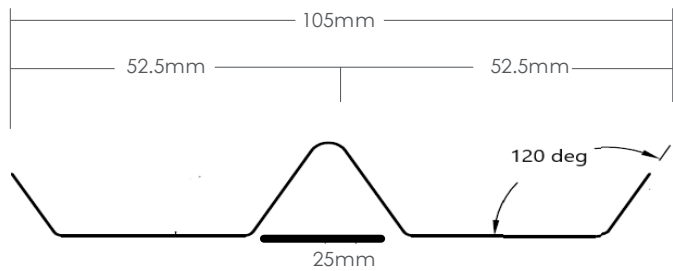
## PHYSICAL DIMENSIONS



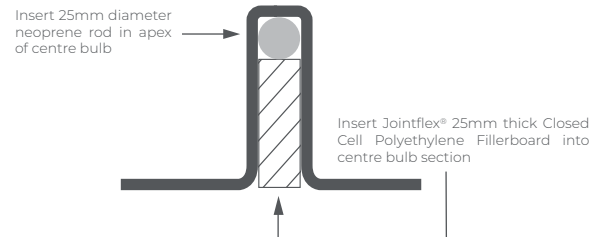
TYPE A



TYPE B



TYPE C - Fabricated to order



CENTRE BULB DETAIL

Note : The above dimensions are only an indication. Project specific shapes and sizes can be custom produced to suit.



## CENTRE BULB DETAILS

1. Insert neoprene rubber rod (diameter to be the same size as width of internal rib width) into the top section of the centre bulb.
2. Insert Jointflex® Closed Cell Polyethylene Fillerboard (thickness to be the same size as width of the internal bulb width) into the centre bulb so it sits directly under the neoprene rod.



## INTERSECTION SECTIONS

At all locations where joints intersect to each other, the connection of the **Hydro-Stop® Copper and Stainless Steel Waterstops** must be undertaken with the use of the specific factory fabricated intersection sections. These sections must be supplied by the manufacturer/supplier of the **Hydro-Stop® Copper and Stainless Steel Waterstop** and be approved and inspected by the relevant authority, prior to use. The straight overlap joining to these intersection pieces is undertaken at site based upon the recommended Joining/Welding Procedures as stated below.



## JOINING / WELDING PROCEDURES

1. Joining of the **Hydro-Stop® Copper and Stainless Steel Waterstops** shall be carried out by the contractor as shown in the drawings.
2. The contractor shall provide all necessary joining materials and equipment. The joining procedure shall
3. be carried out by welding method. approved by the site engineer
4. For copper waterstop the brazing alloy used for brazing shall be silver brazing alloy 250 (SBA 250) or an approved equivalent by the superintendent may be used.
5. All areas to be joined shall be thoroughly cleaned and dried before undertaking the process.
6. The **Hydro-Stop® Copper and Stainless Steel Waterstops** shall be lapped by 100mm at the join areas.





## JOINING / WELDING PROCEDURES (continued)

7. Parts to be joined shall be clamped together such that the gap between the areas to be brazed are within the range of 0.05mm - 0.10mm. Importance and extra care must be taken when brazing the expansion bulb area of the waterstop so as to make sure that it is fully welded and sealed.
8. Brazing flux shall be silver brazing flux no. 2 or equivalent and shall be applied to the parts to be joined and to the brazing rods.
9. The parts to be joined must be pre-heated with a neutral flame and when the correct temperature is achieved (recommended by the manufacturer), the brazing alloy shall be applied, keeping the torch in a constant moving motion.

*Note : Minimum penetration of brazing alloy shall be 10mm.*



## HEALTH AND SAFETY INFORMATION

In confined spaces or in still air conditions, the use of a ventilation fan or suitable respirator should be used, and the advice and approval of the Site Safety Supervisor is essential.



## DISCLAIMER

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials substrates and actual site conditions are such that no warranty in respect of merchantability of or fitness for particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and/or oral recommendations, or from any other advice offered by the Company. The Company also has no express or implied knowledge of any particular purpose for which the product is required and any such information given will not be taken into account in the supply of this product. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in our brochure may change at any time without notice. Any use of this product; **Hydro-Stop® Copper Waterstops** in any application should be approved as suitable for use/application by the Design Engineer and Project Manager.

**Effective Date: 14 NOVEMBER 2019**

### **CJSA**

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