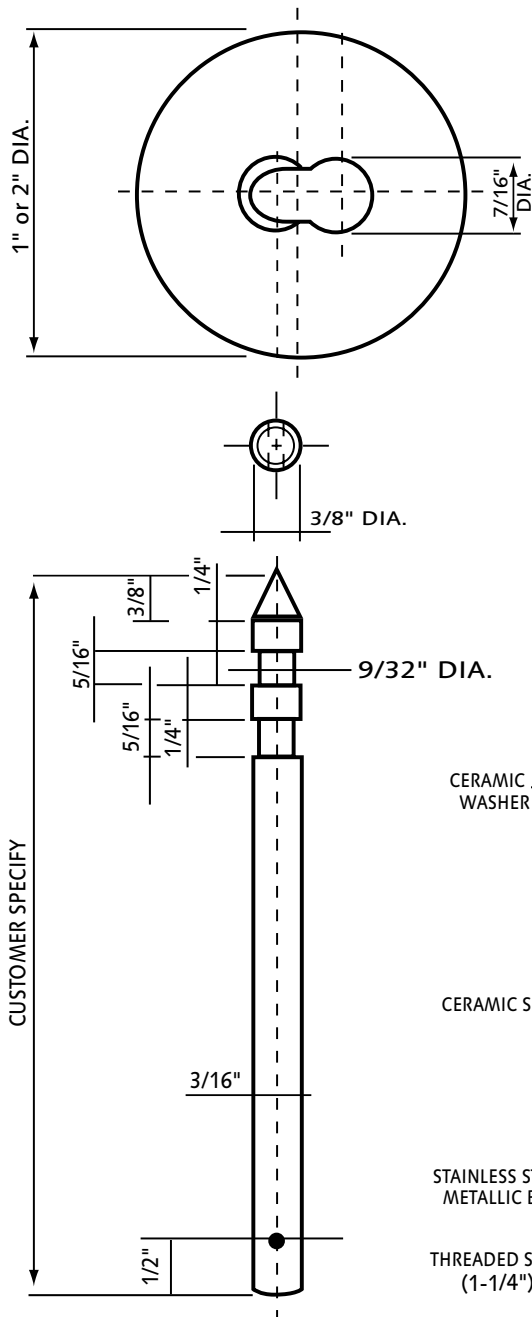




REFRACTORY
ANCHORS, INC.



RA-58 High Temperature Ceramic Fiber Anchoring System

The ceramic anchor and washer are both made from 99% alumina, high fired, to withstand up to a 2800 deg. F continuous use temperature. The anchoring system consists of five components:

1. 99% Alumina Washer in both 1" and 2" configurations
2. 3/8" diameter 99% Alumina spike in variable lengths
3. 310 SS Metallic base to accept the ceramic spike
4. 310 Tie wire to secure the ceramic spike to the metallic base
5. 1/4-20 X 1-1/4" full thread stud to attach to vessel

The high alumina washer and spike anchoring system is ideally suited for high temperature ceramic fiber and board layered construction. Our RA45 Cerafix anchoring system has a maximum temperature use limit of 2300 deg. F. Above these temperatures a system is required that further isolates the metallic components from high oxidative temperatures. The 99% alumina spike and washer is manufactured for a pure fine grain alumina that has been high fired to achieve maximum strength and thermal shock resistance.

The "dog-bone" hole incorporated within the washer allows for a positive locking mechanism that does not rely entirely on compression from the insulation. Proper orientation on sidewalls prevents the washer from vibrating loose. The weight of the insulation materials locks the washer in overhead applications.

Careful consideration must be given when selecting the proper ceramic spike length for a particular lining thickness. The washer can be attached at one of two locations on the ceramic spike. The ceramic spike is then inserted into the 310 metallic base (see drawing). After welded to the vessel, the 1/4-20 threaded stud is threaded up into the bottom of the metallic base. This location is where fine adjustment for the overall anchoring system length is made. The 1/4-20 stud allows for approximately 1-1/4" adjustment in the system length to accommodate variations in insulation thicknesses.

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