

PVHO-I Form VP-2 Acrylic Window Design Certification

Window Description _____ Window Drawing No. _____
Maximum allowable working pressure _____ psi _____ MPa
Maximum design temperature _____ °F _____ °C Minimum design temperature _____ °F _____ °C
Window shape _____
Conversion factor table number _____
Pressure range, N _____ Conversion factor, CF _____
Short-term critical pressure and fig. no. _____

Experimental Verification [Note (1)]
Thickness t (actual) _____ No. 1 _____ No. 2 _____
Do (actual) _____ No. 3 _____ No. 4 _____
Di (actual) _____ No. 5 _____ STCP _____
(actual) temperature _____ °F _____ °C (Note each test specimen FS for full scale or MS for model scale.)
Water temperature _____

Type of failure _____
Test conducted at _____
Test supervised by _____

Window Design
Inner diameter, Di (nominal) _____ Included angle (nominal) _____
External radius of curvature (nominal) _____ Minimum t/Di (calculated) _____
Minimum t (calculated) _____ Di/Df (nominal) _____
Minimum Di (calculated) _____
Diametral interference/clearance between Do of window and window seat at maximum design temperature (calculated) _____
Diametral interference/clearance between Do of window and window seat at minimum design temperature (calculated) _____
Actual t (specified on drawing) _____
Actual Di (specified on drawings) _____ Actual Do (specified on drawings) _____
Actual external radius of curvature (specified on drawings) (spherical or cylindrical) _____
Drawing no. of window _____ Drawing no. of flange _____ Drawing no. of assembly _____
Description of pressure vessel (for which the window has been designed) _____

The viewport design complies with all of the requirements of the Safety Standard for Pressure Vessels for Human Occupancy, subsection 2-2.

viewport designer

date

authorized representative of chamber manufacturer or owner

date

name and address of chamber manufacturer or owner

date

GENERAL NOTE: This form may be reproduced and used without written permission from ASME if used for purposes other than republication.

NOTE:

(1) If STCP is determined experimentally according to para. 2-2.5.2, then the critical pressures of all five windows tested, the testing laboratory, and the test supervisor should be noted here.