

PVHO-1 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) _____

D_o (actual) _____

D_i (actual) _____

Water temperature _____ °F _____ °C

No. 1 _____ No. 2 _____

No. 3 _____ No. 4 _____

No. 5 _____ STCP _____

(Note each test specimen FS for full scale or MS for model scale.)

Type of failure _____

Test conducted at _____

Test supervised by _____

Window Design

Inner diameter, D_i (nominal) _____ Included angle (nominal) _____

External radius of curvature (nominal) _____ Minimum t/D_i (calculated) _____

Minimum t (calculated) _____ D_i/D_f (nominal) _____

Minimum D_i (calculated) _____

Diametral interference/clearance between D_o of window and window seat at maximum design temperature (calculated) _____

Diametral interference/clearance between D_o of window and window seat at minimum design temperature (calculated) _____

Actual t (specified on drawing) _____

Actual D_i (specified on drawings) _____ Actual D_o (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 _____

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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.