

CITY OF LOS ANGELES

CALIFORNIA

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

VAN AMBATIELOS
PRESIDENT

E. FELICIA BRANNON
VICE PRESIDENT

JOSELYN GEAGA-ROSENTHAL
GEORGE HOVAGUIMIAN
JAVIER NUNEZ



ERIC GARCETTI
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

FRANK M. BUSH
GENERAL MANAGER
SUPERINTENDENT OF BUILDING

OSAMA YOUNAN, P.E.
EXECUTIVE OFFICER

Sentech Architectural Systems
4421 Supply Court
Austin, TX 78744

Attn: David Dunham
(512) 266-7045

RESEARCH REPORT: RR 25969
(CSI # 09051)

EXPIRES: November 1, 2020
Issued Date: August 1, 2019
Code: 2017 LABC

GENERAL APPROVAL –Renewal - Vetra Point Glass Fitting.

DETAILS

The Vetra Point glass fitting connects laminated glazing to a structural support system. The fittings are made from ASTM A276 type 316 stainless steel.

The Vetra Point fitting is used to connect the laminated glass to the support arms or support structure by use of nuts CW2-18 and two secondary locknuts CN3-18 and CW1-18 which are attached to the connector bolt CB1-18. The connector bolt has a threaded section with a ball joint on one end that attaches to two parts (CN2-18 and CN1-C-18) which have spherical machined surfaces. The glass is connected to this assembly by threading the cap into the back plate (CN6) which is threaded onto the mounting shaft part CN1-C-18. A countersunk ASTM B221 alloy 6063 aluminum gasket is placed over the cap. The fittings includes a delrin grommet (CG2) and back plate gasket (CG3) as detailed on the attached drawing of the VP40-18-CS fitting.

The connection between the fitting and the glass is a full bearing connection achieved by injecting Hilti HY-70 epoxy through the access holes in part numbers CP2 and CP3.

See Table 1 below for assembly parts, glass composition and allowable assembly loads.

Table 1: Glass Fitting Assembly and Allowable Loads

RR25969
Page 1 of 3

| Fitting Part Number | Cap Part Numbe | Glass Composition | Minimum Edge Distance (in) | Minimum End Distance (in) | Allowable Load in Tension (lbs) | Allowable Load in Shear (lbs) |
|---------------------|----------------|---|----------------------------|---------------------------|---------------------------------|-------------------------------|
| VP40-18-CS | CP3 | 3/8 inch thick tempered exterior lite, a 0.060 inch SGP interlayer, and a 1/2 inch thick tempered interior lite | 6 11/32 | 5 17/32 | 1155 | 1030 |
| VP60-18-.847 | CP2 | 3/8 inch thick tempered exterior lite, a 0.060 inch SGP interlayer, and a 3/8 inch thick tempered interior lite | 3 1/2 | 3 1/2 | 1220 | 1080 |
| VP60-18-.532 | CP2 | 1/4 inch thick tempered exterior lite, a 0.060 inch SGP interlayer, and a 1/4 inch thick tempered interior lite | 3 1/2 | 3 1/2 | 857 | 622 |

The approval is subject to the following conditions:

1. The approval is only for those fittings listed in Table 1 above when installed in the glazing material as described.
2. Design calculations and details of the glazing system shall be prepared by a civil or structural engineer licensed by the State of California, with Sentech Architectural Systems, and shall be submitted to Structural Plan Check for their approval.
3. The fittings shall be tightened to approximately 4 ft-lbs.
4. The maximum distance from the interior face of the glazing to the face of the mounting bracket is 2 ¼ inches.
5. The minimum edge and end distances shall be as listed in Table 1 above.
- 6 The fittings as described above have the allowable loads as listed in Table 1 above.

DISCUSSION

The report is in compliance with the 2017 Los Angeles City Building Code.

The approval is based on tests in accordance with the static load tests of ASTM E488 with a factor of safety of 4.

This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this approval have been met in the project in which it is to be used.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using

Sentech Architectural Systems
RE: Vetra Point Glass Countersunk Fitting

items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

DAVID CHANG, Chief
Engineering Research Section
201 N. Figueroa St., Room 880
Los Angeles, CA 90012
Phone- 213-202-9812
Fax- 213-202-9943

DE
RR25969
TLB1900141
R08/02/2019
2403.2

Attachments: Glass Fitting Details (3 pages)