

Optima System: **Optima 117 plus**

Description: Frameless glazed partition system comprising multiple modules of laminated or toughened glass installed into extruded aluminium track sections with glass sealed into tracks with PVC gaskets and between panels with Optima Nebula™, Aluminium or PETG dry-joints. System incorporates integral deflection head capable of enabling relocation.

Sustainability Scheme: **WELL Building Standard v2 Pilot**

### Light

Feature: **L01 Light Exposure and Education**

Part 1 Ensure Indoor Light Exposure Daylight in regularly occupied spaces / Daylight in common spaces  
b. & c. Use of fully glazed office and meeting room fronts using Optima 117 plus allows for daylight penetration to internal areas beyond perimeter cellular offices assisting with Spatial Daylight Autonomy. It also allows for increased view of sky from desk height.

**Optima 117 plus visible light transmittance (VLT) = 89%**

Feature: **L05 Enhanced Daylight Access**

Part 1 Implement Enhanced Daylight Plan Use of fully glazed office and meeting room fronts using Optima 117 plus allows for daylight penetration to internal areas beyond perimeter cellular offices assisting with internal average daylight factors and average daylight illuminance levels. It also allows for increased view of sky from desk height.

**Optima 117 plus visible light transmittance (VLT) = 89%**

### Sound

Feature: **S03 Sound Barriers**

Part 1 Ensure Adequate For Office Spaces

Wall Construction Optima 117 plus partitions, when appropriately configured, can help to meet the Speech Privacy Potential (SPP) and Sound Transmission Class (STC) relevant to the building type and function.

All Optima systems are subjected to sound insulation tests in accordance with BS EN ISO 10140-1:2010 and BS EN ISO 10140-2:2010 at UKAS accredited laboratories. These are optimised tests of the system only and not aggregate values for screen and door. The result is expressed as an Rw value.

The Optima 117 plus partition system has achieved the following UKAS accredited acoustic values for the stated construct:

32dB (Rw)	Estimate(1)	10mm Toughened Glass in single glazed multi-module screen
33dB (Rw)	Test Ref: 542-434	12mm Toughened Glass in single glazed multi-module screen
35dB (Rw)	Test Ref: 542-435	10.8mm Laminated Glass in single glazed multi-module screen
36dB (Rw)	Estimate(1)	12.8mm Laminated Glass in single glazed multi-module screen
37dB (Rw)	Test Ref: 542-436	10.8mm Acoustic Laminated Glass in single glazed multi-module screen
38dB (Rw)	Test Ref: 542-432	12.8mm Acoustic Laminated Glass in single glazed multi-module screen
40dB (Rw)	Test Ref: 3385-2959	16.8mm Acoustic Laminated Glass in single glazed multi-module screen
40dB (Rw)	Test Refs: WYC386771 & WYC391439	Tech Panel – 100mm overall depth with uninsulated cavity
(1) Estimate based on UKAS accredited test data and glass manufacturers' published performance data.		

It should be noted that in an on-site acoustic test, a partition may demonstrate a 3dB to 8dB lesser performance than under laboratory conditions, depending on the partition type. This can be further affected by ambient noise levels on the receiving side of the test sample and by poorly insulated abutments offering a 'flanking' path for audible sound.

[Reference: Optima 117 plus Designer's guide (Nov 2018)]

Part 2 Ensure Proper Door Specifications The Optima 117 plus partition system is compatible with Axile Pulse, Axile Clarity, Edge Symmetry, Edge Affinity, and 44mm / 54mm timber doors.

- a. STC performance of Optima doors have not been assessed. Acoustic performance is measured in Rw:  
 Edge Series:  
 Rw35dB – single glazed Symmetry door in Microflush frame  
 Rw41dB – double glazed Symmetry door in Microflush frame  
 Rw39dB – single glazed Affinity door in Microflush frame  
 Rw42dB – double glazed Affinity door in Microflush frame  
 Rw37dB – double glazed Flush door in Microflush frame  
 Axile Series:  
 Rw32dB – Clarity door in Microflush frame with threshold seal  
 Timber Doors:  
 Rw31dB – 44mm timber door in Microflush frame with drop seal  
 Rw33dB – 54mm rebated timber door in Microflush frame with drop seal
- b. Gaskets are not provided at the head and door jambs
- c. Timber doors include drop seals  
 Optima glazed doors do not feature drop seals or sweeps at base
- d. All single glazed and timber doors have a non-hollow (solid) core. Double glazed doors feature a sealed air gap

## Materials

Feature: **X10 Volatile Compound Reduction**

Part 1 Manage Volatile Organic Compounds

### a. Halogenated flame retardants

There are no components of types 1, 2, 3, 4 within the Optima 117 plus partition system. 5. Acoustic insulation (glass mineral wool) can be used to ensure acoustic integrity between partitioned spaces as part of the installation which **contains no Halogenated flame retardants**.

### b. Urea-formaldehyde

1. Composite wood products are not used in the Optima 117 plus partition system. Plywood can be used within the optional bespoke 'Tech Panels' where specified. Presence of urea-formaldehyde is unconfirmed.

b. Laminating adhesives (PVB interlayers) are used to form each sheet of laminated glass used in the partitions and **do not contain urea-formaldehyde**.

c. Thermal insulation is not used in the Optima 117 plus partitioning system product. Acoustic insulation can however be used to ensure acoustic integrity between partitioned spaces as part of the installation procedure. The use of glass mineral wool **contains no urea-formaldehyde**.

Part 2 Manage Semi-Volatile Organic Compounds (SVOCs)

The referenced newly installed components are not relevant to the Optima 117 plus partition system.

Feature: **X11 Long-term Emission Control**

Part 1 Manage Furniture and Furnishings Emissions

Not relevant to the Optima 117 plus partition system as considered a permanent fixture rather than furnishings and does not fall under the scope of Feature X11, Part 1.

Part 2 Manage Flooring and Insulation Emissions

Glass mineral wool insulation can be used in optional 'Tech Panels' to provide acoustic performance and is an inherently non-emitting source of VOCs.

Products used: **Isover Acoustic Partition Roll (APR1200)**

### a. Meets eurofins Indoor Air Comfort Gold (v5.3a 2015)

[Reference: eurofins IACG-400-UK-2015 certificate (April 2015)]

Indoor Air Comfort Gold has been accepted as an alternative for the Feature requirements.

[Reference: WELL Equivalencies #04-0011]

DATE: 13/09/2021

## Feature

**X12 Short-Term Emission Control**

The Optima 117 plus partition system can optionally be powder-coated or anodized during **off-site manufacture** and employs dry joints between horizontal glass sections not requiring the use of VOC emitting silicones or sealants.

To maintain acoustic integrity the Optima 117 plus partition system installation ensures all abutment tracks are properly sealed to the structure with proprietary acoustic sealant.

Part 1 Manage Product Emissions: Adhesives, Sealants, Paints and Coatings  
Products used: **Dow DOWSIL™ 791 Weatherproofing Sealant**  
**a. Meets CDPH Standard Method v1.2 (January 2017)**  
[Reference: Dow Indoor Air Quality Evaluation CDPH (February 2019)]

Part 2 Manage Product Content: Adhesives, Sealants, Paints and Coatings  
Products used: **Dow DOWSIL™ 791 Weatherproofing Sealant**  
**b. Meets SCAQMD Rule #1168**  
[Reference: Dow Corning Environmental Product Information]

## Reference Documents:

S03 Sound Barriers:

**Optima 117 plus Designer's Guide November 2018)**



## Reference Documents:

X11 Long-term Emission Control:

**Isover APR1200 Eurofins Indoor Air Comfort Gold certificate (April 2015)**



DATE: 13/09/2021

## Reference Documents:

X12 Short-Term Emission Control:

## Part 1. Dow Corning Environmental Product Information

## Part 2. Dow Indoor Air Quality Evaluation – CDPH (February 2019)

Released by: U.S. Environmental Protection Agency  
Date: March 20, 2019  
Project ID: # 100004102-210219  
Test Report # 100004102-210219  
CDPH 116-102

**INDOOR AIR QUALITY EVALUATION FOLLOWING THE REQUIREMENTS OF COPPERHILL STANDARD METHOD**

**Product Description:** DOWSIL™ 791 Silicone Weatherproofing Sealant

**Customer Information:** DOW SILICONES CORP  
KELLY ALLOE  
2200 W SALZBURG RD  
MIDLAND, MI 48666  
USA

**Testing Laboratory:** 2211 Newmarket Parkway, Suite 106, Marietta, GA 30067-6399 USA

**Product Category:** Adhesive/Sealant

**Product Sub-Category:** Bead Adhesive

**Date Received:** February 26, 2019

**Test Description:** The product was received by U.S. Environment as packaged and shipped by the customer. The package was visually inspected and stored in a controlled environment immediately following sample check-in. Just prior to testing, a 30" wide bead 11.3" long was applied to a foil-wrapped plate. The sample was immediately placed inside the environmental chamber, and tested according to the specified protocol.

**Test Date:** 2/28/2019 - 3/14/2019

**Product Area Exposed:** length = 0.292 m

**Chamber Volume:** 0.0070 m<sup>3</sup>

**Product Loading Rate:** 3.30 min/m<sup>3</sup>


**Test Chamber Conditions:** Air change rate: 1.00 ± 0.05 1/h; Temperature: 22.3°C ± 2.3°C  
Inlet air flow rate: 0.007 ± 0.004 m<sup>3</sup>/h; Relative Humidity: 50% RH ± 5%

**Test Method:** CDPH - CA Section 01360 (Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers) 1.2

**Released by:** Alyson M. Murphy  
Chemistry Laboratory Director

This report shall not be reproduced, stored in full, without permission from U.S. Environment. Results contained within this report only apply to the actual product tested under the testing conditions documented in this report.

**PHOTOGRAPH OF SAMPLE**



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**ENVIRONMENTAL PRODUCT INFORMATION**  
FOR LEED® GREEN BUILDING CERTIFICATION PROGRAM

**LEED PRODUCT INFORMATION**  
Thank you for your LEED inquiry. Following is the product information requested.

**Materials and Resources Credit 1:** This credit relates to 10-20% of the total material cost of products selected, harvested, or recovered, as well as manufactured within 500 miles of the building site location. Because of Dow Corning's supply chain and distances between suppliers and manufacturing sites, Dow Corning products cannot contribute to this credit.

**Materials and Resources Credit 4:** The percentage of postconsumer and preconsumer recycled content of Dow Corning sealants, primers, and caulks is zero.

**Product Use Information**  
This document outlines the quantification data of the products listed below, as a contribution toward satisfying R2 Credit 4 under LEED. Products are not reviewed or certified under LEED. LEED credit requirements cover the performance of materials in aggregate, not the performance of individual products or brands. For more information on LEED, visit [www.usgbc.org/leed](http://www.usgbc.org/leed).

Product Type	Product Manufacturer	Product Name / Model	Product VOC Content	Allowable VOC Content	
1	Architectural Sealant	Dow Corning	791 Silicone Weatherproofing Sealant	30	250
2					
3					
4					

**FOR ALL RATING SYSTEMS ASSOCIATED WITH:**

- ☒ LEED Building Design and Construction
- ☒ LEED Interior Design and Construction
- ☒ LEED Operations and Maintenance
- ☒ LEED for Homes
- ☒ LEED for Neighborhood Development

**VOC METHOD**

- ☒ South Coast SCQARD Rule #1106 (Sealants)
- ☒ South Coast SCQARD Rule #1113 (Coatings)
- ☒ Key Area Air Quality Regulation # Rule 31
- ☒ California Specification 01360

**LIMITED WARRANTY INFORMATION**  
The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used as a substitute for customer's tests to ensure that our products are fully effective, and fully suitable for the intended end use. Suggestions of use shall not be taken as an endorsement or implied warranty.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment. This warranty is limited to the product as shipped and is not intended to be a warranty of performance or replacement of any product except to the extent that we warrant.

**DECLARATION HOLDER**  
The declaration holder is liable for the information and evidence on which this declaration is based.

Name: \_\_\_\_\_ Phone number: \_\_\_\_\_ Email: \_\_\_\_\_  
Dow Corning: \_\_\_\_\_  
Organization: \_\_\_\_\_ Best Corning Office: \_\_\_\_\_  
Product Specification: \_\_\_\_\_ Corporate: \_\_\_\_\_  
Address: \_\_\_\_\_  
2200 W Salzburg Rd., Midland, MI 48666

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