



# Phius Window and Door Certification Program

## Orange Path Fees and Submission Requirements

#### **Program Overview**

The Phius Window Data Certification Program is a voluntary program that verifies the performance of fenestration products at the individual component level (glass, spacer, and frame) via LBNL THERM/WINDOW software.

Passive building practitioners need this component data to properly model the thermal performance of a fenestration product (window/door/skylight) at its exact size for a passive building project. This data is generally not readily available in the marketplace. Certified products are listed publicly in the Phius Window/Door Database, and manufacturers also receive digital certificates that can be printed, distributed, or posted to their respective websites.

### **Orange Path Conditions**

The Phius Orange Path is available to all manufacturers and does not require any existing certifications.<sup>1</sup> Products are modeled in-house at Phius or by a Phius-trained Orange Path simulator. All submitted products must use glass panes listed in the LBNL IGDG (International Glazing Database).

Note: Manufacturers with NFRC CPD numbers for their products are encouraged to use the Phius Blue Path.

#### **Orange Path Fees**

The cost of Orange Path certification is split between two fees:

- 1. **Phius Database Listing Fee.** This fee covers the cost of hosting certified product data on Phius.org. The fee structure is as follows, and applies per job (i.e., per batch of products to be certified):
  - ➤ 1 10 products: \$650
  - > 11+ products: \$650 + \$15 per product over 10
- 2. **Orange Path Calculation fee.** The cost of this fee depends on your scope of certification. The primary cost driver is the number of unique frame profiles you wish to use. For a quick estimate, use the companion Orange Path Cost Estimation Tool on the Phius website. Phius will provide an official quote prior to the start of all certification work.
  - Note: The average Orange Path job costs approximately \$3,000, inclusive of the Phius Database Listing Fee.

#### **Orange Path Submission Checklist**

Please submit the following information to Phius to receive a quote and begin your certification work:

- ✓ Dimensioned drawings of all frame profiles used.
  - **Note:** .DXF file format is preferred for drawings.
- ✓ Bill of materials, preferably with material callouts on your drawings
- ✓ Manufacturer(s) and model(s) of all spacers used.
- ✓ LBNL IGDB ID numbers for all IGU panes.
- ✓ Simulation order sheet with IGU details and product combinations to be modeled.

<sup>&</sup>lt;sup>1</sup> Sliding windows must also submit airtightness test reports. Acceptable standards include but are not limited to: ASTM E283 or ISO ISO 6613:2023. There is no required performance value for these tests.