

01

Product Overview

The **CANOPY HYDRAULIC 100 Series Awning Window** combines effortless operation with durable all-weather performance. Dual hydraulic actuators raise the top-hinged sash a full 90 degrees and hold it securely overhead, transforming a kitchen window into a pass-through serving counter with a built-in weather canopy. Its robust 2.0 mm thermal-break aluminum frame provides excellent resistance to weather conditions and guarantees long-lasting dependability, while a range of customizable glass options — Low-E2, Low-E4, smart, and frosted — enhance energy efficiency, privacy, and aesthetic appeal. Featuring a factory-built insect screen as standard equipment, top-integrated pull handles, and your choice of with or without bottom frame, the CANOPY 100 Series offers contemporary style and reliable operation in one clean wall of glass.

Size Limitations

The CANOPY HYDRAULIC 100 Series accommodates widths from 24" to 72" and heights from 20" to 60". The standard unit shown in this specification measures 41.5" W × 59.5" H (1054 × 1511 mm). Adhering to these size guidelines is crucial for ensuring smooth hydraulic operation, proper 90° opening clearance, and lasting durability. Exceeding these limits or incorrect installation may affect performance and weatherproofing. Beyond the recommended boundaries, additional customizations are possible — contact our team.

Energy Efficiency

Glass can either be transparent or tailored with coatings such as Low-E2 and Low-E4 to boost energy efficiency and comfort. These Low-E coatings reflect infrared radiation, aiding in keeping interiors cooler during summer and warmer in winter, while still allowing visible light to pass through. They also enhance insulation and minimize UV rays that can cause furniture to fade. When paired with thermally broken aluminum frames — which interrupt the heat path through the profile — these elements greatly enhance the thermal efficiency of the window, leading to greater energy savings, sustained comfort, and increased value for both homes and commercial buildings.

Performance Chart

Frame Material	Aluminum 6063-TS	Solar Heat Gain Coefficient	0.23
Frame Thickness	2 mm	Visible Transmittance	0.51
U-Factor	26	Air Leakage	0.30
Argon Fill	90%	Condensation Resistance	61

02

Glass Options

STANDARD **Low-E2:** A dual-pane configuration utilizing two layers of microscopic metallic coating to offer balanced, year-round energy efficiency. It reflects a moderate amount of solar heat during summer while trapping indoor warmth during winter. It serves as a cost-effective, baseline choice for moderate climates.

ADVANCED **Low-E4:** An advanced dual-pane setup featuring four layers of high-performance metallic coatings to maximize energy savings. It blocks the vast majority of destructive UV rays and solar heat while letting in clear, natural light. This option is ideal for climates with intense sun exposure and extreme temperatures.

PREMIUM **Triple-Pane Insulated Glass:** A heavy-duty unit built with three separate glass panes that create two independent insulating gas chambers. This configuration maximizes thermal resistance, dramatically lowers your energy bills, and eliminates winter draft zones. It provides the ultimate level of cold-climate insulation.

ELITE TIER **Laminated Insulated Glass (LIC):** A premium dual-pane setup where one pane consists of two glass sheets permanently bonded to a tough plastic interlayer. This design dampens incoming street noise, stops forced entry by holding together when smashed, and blocks nearly all UV fading. It delivers a comprehensive solution for home security, quietness, and weather protection.



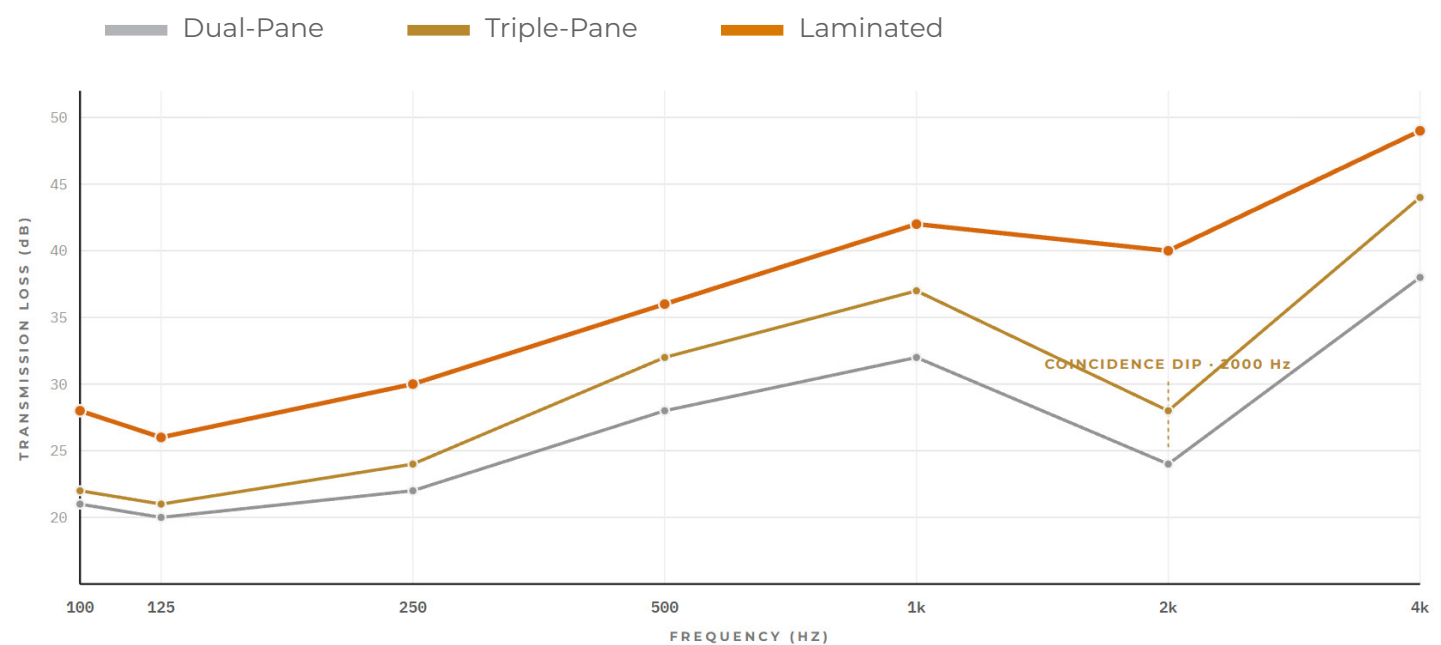
GLASS TYPE	U-FACTOR Reduces Heat Loss	SOLAR HEAT GAIN COEFFICIENT LIMITS SOLAR HEAT	VISIBLE LIGHT TRANSMITTANCE CONTROLS LIGHT PASSAGE	UV PROTECTION BLOCKS UV RAYS
Dual-pane Low-E2	★ ★ ★	★ ★ ★	★ ★ ★ ★ ★ ★	★ ★ ★
Dual-pane Low-E2	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★
Triple-pane Glass	★ ★ ★ ★ ★ ★	★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★
Laminated Glass	★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★ ★

03

Sound Performance

Our architectural glass lineup is engineered to satisfy distinct performance thresholds. While thermal coatings optimize energy efficiency, acoustic comfort relies on structural mass, air-space decoupling, and material vibration dampening. This document details the acoustic attenuation properties across our four core performance tiers

FREQ (HZ)	PITCH PROFILE / ACOUSTIC SOURCE	DUAL-PANE Sound Transmission Loss (dB)	TRIPLE-PANE Sound Transmission Loss (dB)	LAMINATED Sound Transmission Loss (dB)
100	Deep Bass, Heavy Trucks Idling	21	22	28
125	Low Rumble, Railway & Aircraft	20	21	26
250	Mid Range, Male Speech Baseline	22	24	30
500	Mid-High, Office Activity & Female Speech	28	32	36
1000	High Frequency, Traffic Horns & Sirens	32	37	42
2000	Critical Glass Coincidence Resonance Dip	24	28	40
4000	Ultra-High Pitch, Screeching Brakes	38	44	49



04

Features & Finishes

The **Canopy Hydraulic 100 Series** is engineered for homeowners who refuse to compromise on quality, durability, and long-term performance. Its dual hydraulic drive system is rigorously designed to withstand heavy daily use and hold the sash securely at 90 degrees in all weather. To perfectly match your architectural vision, the series offers complete design freedom — choose your frame configuration, glass package, and finish.



Matte Black

Anodized Silver

Architectural White



Effortless 90° Hydraulic Operation

The dual hydraulic actuator system raises the top-hinged sash smoothly to a full 90 degrees and holds it overhead — no cranks, no stays, no slamming. The raised sash locks firmly in place, doubling as a weather canopy over the serving counter.

1

Recessed pull handles are built into the top rail of the sash, keeping the interior face clean and making the heavy glass sash effortless to lift and pull closed.

2

Built-In Insect Screen — Standard

1

A factory-integrated screen panel spans the full opening and lowers into place when the sash is open — ventilation without the bugs. Standard equipment, not an add-on.

2

2.0 mm aluminum profiles with 14.8 mm polyamide insulation strips interrupt the thermal bridge, cutting heat transfer and eliminating condensation at the frame.

3

Works together with multi-layer silicone-sealed weatherstrips and EPDM gaskets for quiet, weathertight closure.



05

Configurations

Available Configurations

WITH BOTTOM FRAME

Classic awning installation with a full perimeter frame. The bottom sill provides a finished interior ledge and maximum weather sealing. Best for traditional window replacements.



WITHOUT BOTTOM FRAME

The bottom frame member is omitted, creating a flush, floor-of-opening pass-through. Run your countertop straight through the wall for a true indoor-outdoor bar. Best for new-construction pass-through counters.



Frequently Asked Configuration Questions

Do the hydraulic actuators require power?

No — the actuators are self-contained hydraulic dampers. The sash is lifted and closed manually; the hydraulics control the descent and hold the sash at 90°.

Is the 100 Series top-hinged?

Yes — the sash hinges at the head of the frame and opens outward from the bottom, providing ventilation and rain protection even when open.

Can I get it without the screen?

The insect screen is standard equipment. It can be omitted by request on custom orders.

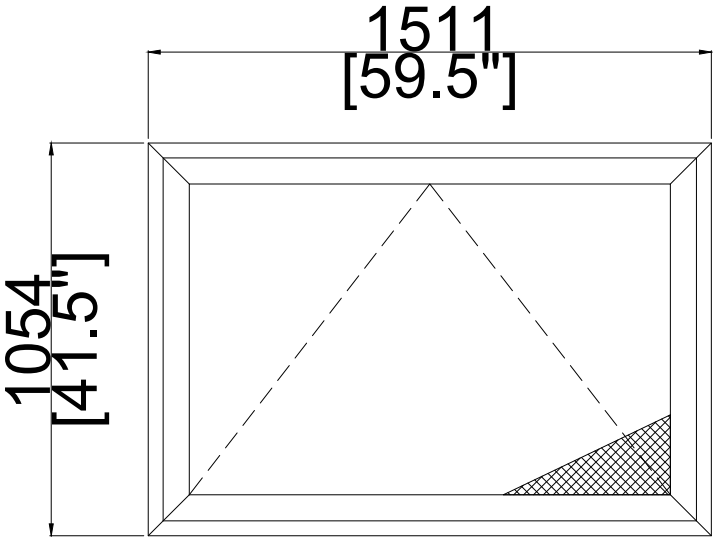
What is the system depth?

5.8" overall frame depth including the screen. Verify rough-opening depth and interior trim conditions before ordering.

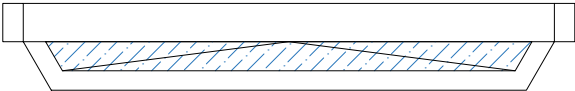
06

Drawings

Front View

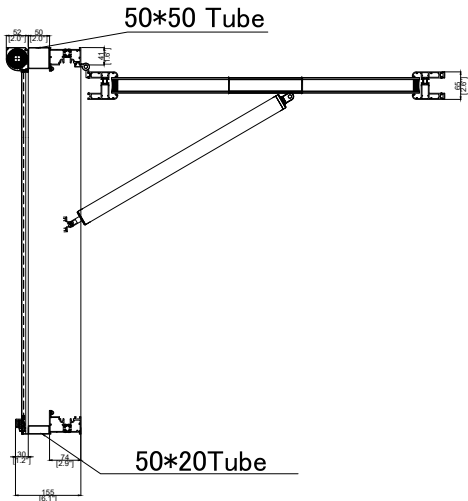


INTERIOR



EXTERIOR

Side View



Top Down View

