

Argon Gas Fill Guide

Why argon, how it works, optimal cavity widths, and when to specify krypton

Overview

Argon is a colourless, odourless, non-toxic inert gas making up 0.93% of Earth's atmosphere. It has 34% lower thermal conductivity than air, improving DGU insulation by around 15%. CSU offers argon fill at 90%+ concentration as an optional upgrade on any unit.

Property	Dry Air (Standard)	Argon (Optional)	Krypton (Special)
Thermal conductivity	0.026 W/mK	0.018 W/mK	0.010 W/mK
Density	1.23 kg/m ³	1.66 kg/m ³	3.43 kg/m ³
U-value benefit	Reference	~15% better	~25% better
Optimal cavity	12-16mm	16-20mm	10-12mm
Depletion rate	N/A	<1% per year	<1% per year

When to Specify Krypton

- **Heritage / slim-fit:** 6-12mm cavities where argon is less effective.
- **Slim TGU:** where a thinner profile is needed — a 28mm krypton TGU matches a 44mm argon TGU.
- **Passivhaus:** where absolute maximum thermal performance is required.
- **Listed building frames:** where standard cavities won't fit.

How to Order

Contact our sales team: 020 8574 9342 | 07305 993794 | sales@csultd.co.uk | csultd.co.uk — quotes returned within 2 business hours (Mon-Fri, 8am-5pm).