



**The Glass Convention Nordic 2024  
Copenhagen  
August 19. & 20. 2024**

**Monday August 19.  
14:00  
Plenary talks on the issues of future IGU  
constructions**

## ***Future IGU constructions***

### ***IGU today***

**EN 1279** Glass in building. Insulating glass units

**ISO 19916** Glass in building. Vacuum insulating glass

## *Future IGU constructions*

### *IGU today*

**EN 1279-1:2018** Glass in building. Insulating glass units Generalities, system description, rules for substitution, tolerances and visual quality

**EN 1279-2:2018** Glass in building. Insulating glass units Long term test method and requirements for moisture penetration

**EN 1279-3:2018** Glass in building. Insulating glass units Long term test method and requirements for gas leakage rate and for gas concentration tolerances

**EN 1279-4:2018** Glass in Building. Insulating Glass Units Methods of test for the physical attributes of edge seal components and inserts

**EN 1279-5:2018** Glass in building. Insulating glass units Product standard (CE)

**EN 1279-6:2018** Glass in building. Insulating glass units Factory production control and periodic tests

## *Future IGU constructions*

### *IGU today*

**ISO 19916-1:2018** Glass in building. Vacuum insulating glass Basic specification of products and evaluation methods for thermal and sound insulating performance

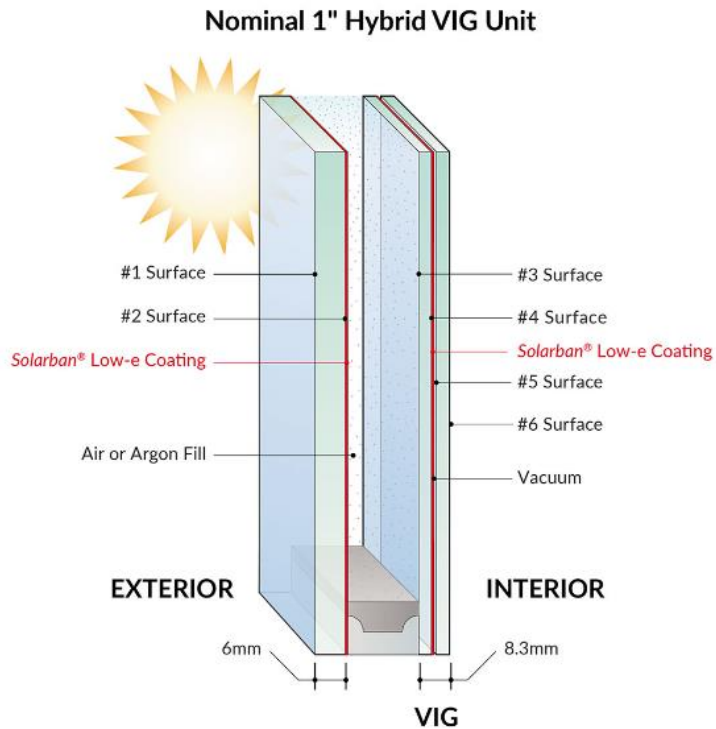
**ISO 19916-3:2021** Glass in building. Vacuum insulating glass Test methods for evaluation of performance under temperature differences

**NREL** (National Renewable Energy Laboratory) "Guidelines and Specification for Enhance Durability Evaluation of Isolating Glass and Vacuum Isolating Glass Units"  
2022

**ASTM** New standard 2025

# Future IGU constructions

## VIG: "single" or hybrid

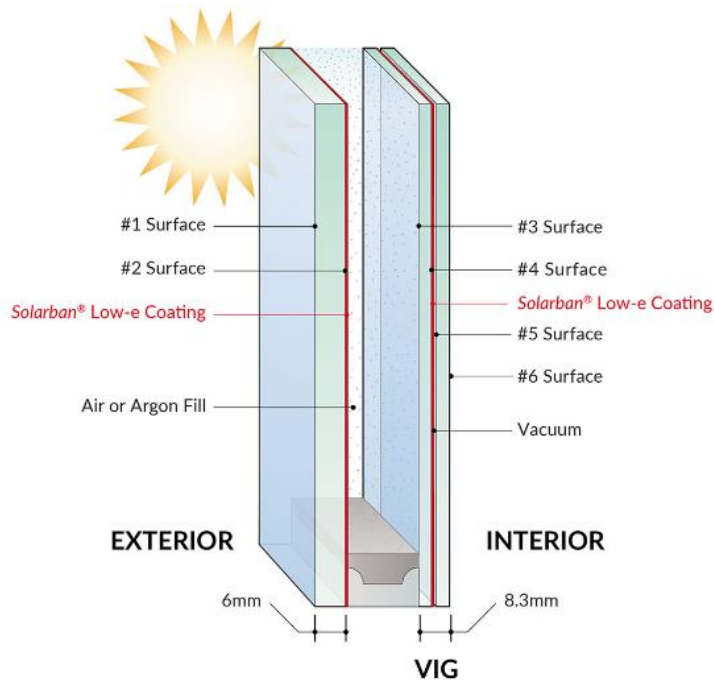


How to implement laminated as inner glass in roofs?

# Future IGU constructions

## VIG: “single” or hybrid

Nominal 1" Hybrid VIG Unit



Pilkington **Spacia™**.

VITO (before PPG) **VacuMax™** VIG.

AGC Glass Europe **FINEO®** (and Schüco)

**Guardian Vacuum IG** (Velux)

**BENGglas** Niederlande

**LandVac** China