EnergyTech™

EnergyTech™ offers a range of locally made clear and toned glass options designed to improve thermal insulation and provide a choice of solar control performance with low visible light reflection.

Features

Energy Efficiency
EnergyTech™ can keep the temperature of your room controlled, lowering your energy consumption and reducing the need for additional heating and cooling.

Low E Coating
Coating is applied that allows natural light through without emitting radiant heat, maximising light and energy efficiency.

Climate
EnergyTech™ is designed with a consideration for mixed and warmer climates or where mid-range solar control and insulation are desired.

Easy Processing
EnergyTech™ can be toughened, laminated, curved or used in an insulated glass unit.

Product Range

Clear	
Available Thickness (mm)	3, 4, 5, 6, 8, 10, 12
Maximum Sheet Size (mm)	3660×2440 (3mm), 5100×3210 (4-12mm)

Grey	
Available Thickness (mm)	6
Maximum Sheet Size (mm)	5100×3210

Applications

External

Doors, Windows, Shop Front, Roof Glazing, Frameless Glazing

Technical Data

Performance

Single Glazing

Product Name	Nominal Thickness	Visible			Solar		UV Trans.	U-Value	SHGC	Shading Co.	Weight m²
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
EnergyTech™ Clear (#2)	3	83	11	11	71	11	58	3.7	0.74	0.85	7.5
EnergyTech™ Clear (#2)	4	83	11	11	68	11	54	3.7	0.72	0.83	10
EnergyTech™ Clear (#2)	5	82	11	12	67	11	52	3.7	0.71	0.81	12.5
EnergyTech™ Clear (#2)	6	81	11	12	65	10	48	3.6	0.7	0.8	15
EnergyTech™ Clear (#2)	8	81	10	11	66	10	50	3.7	0.7	0.81	20
EnergyTech™ Clear (#2)	10	79	11	12	60	9	43	3.6	0.66	0.76	25
EnergyTech™ Clear (#2)	12	79	10	11	56	8	42	3.6	0.63	0.73	30
EnergyTech™ Grey (#2)	6	40	6	9	37	7	16	3.7	0.48	0.55	15

Double Glazing

Product Name	Nominal Thickness	Visible			Solar		UV Trans.	U-Value		SHGC	Shading Co.	Weight m²
		Trans.	Refl. Out	Refl. In	Trans.	Refl.		Air	Argon			
EnergyTech™ Clear (#2) + QFloat™ Clear	4+12+4	75	17	18	57	15	44	1.9	1.7	0.64	0.74	20
EnergyTech™ Clear (#2) + QFloat™ Clear	5+12+5	73	17	18	54	14	39	1.9	1.7	0.62	0.72	25
EnergyTech™ Clear (#2) + QFloat™ Clear	6+12+6	73	16	17	52	14	36	1.9	1.6	0.62	0.71	30
EnergyTech™ Clear (#2) + QFloat™ Clear	8+12+6	72	16	17	52	13	36	1.9	1.7	0.62	0.71	35
EnergyTech™ Clear (#2) + QFloat™ Clear	10+12+6	70	16	17	48	12	32	1.9	1.6	0.58	0.66	40
EnergyTech™ Clear (#2) + QFloat™ Clear	12+12+6	70	15	17	46	11	32	1.9	1.6	0.55	0.63	45
EnergyTech™ Grey (#2) + QFloat™ Clear	6+12+6	35	8	16	29	8	13	1.9	1.7	0.39	0.44	30

Considerations

Application

EnergyTech™ when single glazed, must be single glazed with the exposed coating to the inside of the building (surface #2). When incorporated into IGUs solar control glass products can be glazed with coatings to surface #2 or #3.

Glass Processing

Does not require edge deletion for use in insulated glass units.

Thermal Stress and Fracture Risk

Some products recommended for thermal stress fracture risk assessment.

Large Projects

Oceania Glass recommends that for large glazing facades (particularly curtain wall) the customer should highlight this in writing to enable consideration of colour management of supplied product.

How to Specify

Available colours and thicknesses:

Clear   3, 4, 5, 6, 8, 10 & 12mm
Grey   6mm

Select from: Annealed, Heat Strengthened, Toughened or Toughened Heat Soaked

If unsure, select in compliance with AS1288–2021 or manufacturers recommendation.

The glass shall comply with the following performance criteria:

- U value
- Solar Heat Gain Coefficient (SHGC)
- Visible Light Transmission %
- Glass Only Values
- Total window

Annealed

Annealed glass is glass produced without internal stresses imparted by heat treatment, i.e., rapid cooling, or by toughening or heat strengthening. Annealed glass is not a Grade A safety glass.

Toughened

Glass converted to a safety glass by subjection to a process of pre-stressing so that, if fractured, the entire piece disintegrates into small, harmless particles. Toughened glass is a Grade A Safety Glass.

Heat Soaking

Heat soak testing is a destructive test, which reduces the likelihood of spontaneous breakage by converting impurities such as nickel sulphide inclusions. Heat soaking is required in some but not all applications. If unsure, select in compliance with AS1288-2021 or manufacturers recommendation.

Heat Strengthening

All glass which requires extra strength and thermal resistance will be heat strengthened. Heat strengthening increases the strength of annealed glass; however, it is not a substitute for toughened glass.

In the event of fracturing heat strengthened glass will crack and tends to remain in glazed position.

Toned Glass

Toned glass absorbs a proportion of solar radiation and may require a thermal assessment depending on application.

All glass is to be selected and installed in accordance but not exclusively with the following Australian and/or New Zealand Standards

- AS 1288 Glass in Buildings Selection and Installation
- AS 1170 Minimum Wind Loads on Structures
- AS/NZ 2208 Safety Glazing Materials in Buildings
- AS/NZ 4666 Insulating Glass Units
- AS/NZ 4667 Quality Requirements for cut-to-size and Processed Glass

Oceania Glass makes and distributes glass. Oceania Glass does not process glass nor produce Insulated Glass Units. Processing of glass and production of Insulated Glass Units is undertaken by independent processors. Speak with your nominated glass processors to understand their processing capability.