

Material identification data

Aluminium EN AW 6060 - T66

Density	r	2,7	g/cm ³
Tensile strength	R _m	215	Mpa
Minimum yield point	R _{p0,2}	160	Mpa
Coefficient of thermal expansion	a	23,5x10 ⁻⁶	K ⁻¹
E-module	E	7000	kN/cm ²
Coefficient of thermal connection	l	160	W/mK
Permissible tension			
- Tension and pressure (DIN 4113 type of load H)	s	8,8	kN/cm ²
- Tension and pressure (DIN 4113 type of load HZ)	s	10,0	kN/cm ²
- Thrust (DIN 4113 type of load H)	t	5,0	kN/cm ²
- Thrust (DIN 4113 type of load HZ)	t	5,8	kN/cm ²

Set of rules and standards for façades

In addition to the state building regulations and guidelines, the currently valid version of the standards and the contracting regulations for the award of public work contracts for the metal trade, glazing, building and construction industry and building and construction physics are decisive.

The following list contains a summary of the important standards and regulations. Completeness may not be assumed.

Aluminium and aluminium alloys

DIN EN 485	Aluminium and aluminium alloys; hinges, sheets and plates
DIN EN 515	Aluminium and aluminium alloys; semi-finished products; designation of the condition of the material
DIN EN 573	Aluminium and aluminium alloys – chemical compound and type of semi-finished products
DIN EN 755	Aluminium and aluminium alloys – extruded rods, pipes and profiles
DIN EN 12 020	Aluminium and aluminium alloys – extruded precision profiles made from EN AW-6060 and EN AW 6063 alloys
DIN 17 611	Anodized products made from aluminium and aluminium wrought alloys – technical conditions of delivery

Metal window manufacturers

DIN 18 073	End pieces for rolls, sun shades and screens for the building and construction industry; terms, requirements
DIN 18 201	Tolerances in the building and construction industry – terms, principles, application, examination
DIN 18 202	Tolerances in buildings
DIN 18 357	Standards and the contracting regulations for the award of public work contracts – Part C: General technical terms of contract for structural performance (ATV); ironmongery work
DIN 18 360	Standards and the contracting regulations for the award of public work contracts – Part C: General technical terms of contract for structural performance (ATV); metal work

Static values

DIN 1055	Action on structures
DIN 4113	Aluminium constructions mainly under dead loads
DIN 18 055	Windows; joint permeability, water tightness and mechanical stress; requirements and examination
DIN 18 056	Window walls; dimensioning and design
DIN 18 516	Cladding of outside walls, rear ventilated
	Technical rules for the use of in-line bedded glazing

Glazing

DIN EN 572	Glass in the building and construction industry – basic soda-lime glass products
DIN 7863	Non-cellular elastomer sealing profiles in window and façade construction; technical terms of delivery
DIN 18 361	Standards and the contracting regulations for the award of public work contracts – Part C: General technical terms of contract for structural performance (ATV); glazing
DIN 18 545	Sealing glazing using sealing material
DIN 52 460	Joint and glass sealing – terms
DIN 52 452	Examination of sealing material for the building and construction industry
	Glazing guidelines of the glass suppliers
	Technical guidelines of the glazing trade

Thermal insulation

DIN 4108	Thermal insulation and energy saving in buildings
DIN EN ISO 10077	Thermal behaviour of windows, doors and end pieces – calculation of the coefficient of heat transmission
DIN EN 12 412	Thermal behaviour of windows, doors and end pieces – determination of the coefficient of heat transmission by means of the heating box procedure
DIN EN 13 947	Thermal behaviour of curtain walls – calculation of the coefficient of heat transmission – simplified procedure
	Energy saving directive

Soundproofing

DIN EN ISO 717	Acoustics – evaluation of the soundproofing in buildings and components
DIN 4109	Soundproofing in buildings
DIN EN ISO 10848	Acoustics – test bench measurement of the flank transmission of airborne sound and impact sound between adjacent rooms
DIN EN 20 140	Acoustics – measurement of the soundproofing in buildings and components

Sun shade

DIN EN 410	Glass in the building and construction industry – determination of the light- technical and radiative-physical parameters of glazing
DIN 4108 – 2	Thermal insulation and energy saving in buildings – Part 2: Minimum thermal insulation requirements
DIN EN 13 363	Sun shades in combination with glazing – calculation of the solar radiation and degree of light transmission
	Energy saving directive

Safety

DIN EN 356	Glass in the building and construction industry – special safety glazing – test procedure and classification of resistance to manual operation
DIN V ENV 1627	Windows, doors, end pieces – burglar protection – requirements and classification

Fire protection

DIN 4102	Effect of fire on building materials and components
DIN 18 095	Doors; smoke-protection doors

Sealing of the building

DIN 18 195	Sealing of the building
DIN 18 540	Sealing of outside wall joints in buildings using joint sealing material

Miscellaneous

DIN EN 12 207	Windows and doors – air permeability – classification
DIN EN 12 208	Windows and doors – water tightness – classification
DIN EN 12 210	Windows and doors – resistance to wind load – classification
DIN EN 12 211	Windows and doors – resistance – test procedure
DIN EN 12 152	Curtain walls – air permeability – performance qualifications and classification
DIN EN 12 153	Curtain walls – air permeability – test procedure
DIN EN 12 154	Curtain walls – water tightness – performance qualifications and classification
DIN EN 12 155	Curtain walls – water tightness – laboratory test whilst applying static pressure
DIN EN 12 179	Curtain walls – resistance to wind load – test procedure
DIN V ENV 13 050	Curtain walls – water tightness – laboratory test with alternating air pressure and spraying with water
DIN EN 13 116	Curtain walls – resistance to wind load – performance qualifications
DIN EN 13 830	Curtain walls – product standard
DIN EN 14 019	Curtain walls – shockproofing – performance qualifications