

ETEM SECURITY SYSTEMS

for private and professional use





ETEM SECURITY SYSTEMS

SECURITY IS OFTEN A CONCERN IN COMMERCIAL OR RESIDENTIAL BUILDINGS. STANDARD ARCHITECTURAL SYSTEMS FOR MAIN ENTRANCES, DOORS, WINDOWS OR EVEN CURTAIN WALLS, CAN BE BROKEN WITHIN A VERY SHORT TIME FRAME AND WITH VERY SIMPLE LEVERAGE TOOLS.

ETEM offers a variety of products for protection against Vandalism, Burglary and Ballistic Attack. Identifying the risk is essential in choosing the proper product. With comprehensive and extended testing from accredited laboratories, ETEM security systems deliver their claim.

In designing ETEM security products, our objective is to create systems that will work together with the rest of ETEM's product range and offer the realized benefits of ETEM systems. Aesthetics, functionality and longevity are characteristics that are present in ETEM's security systems allowing the freedom of creation and their architectural integration in the building.

Combining experience and expertise, ETEM has been selected in a large number of security systems installations. ETEM security systems have been used in Banks, insurance companies, post offices, institutional organizations, shopping malls, private residences and more.





BURGLAR RESISTANCE

BURGLAR RESISTANCE IS THE DESCRIPTION USED TO DEFINE PRODUCTS AND COMPONENTS WHICH ARE DESIGNED TO PREVENT UNWANTED ENTRY INTO AN AREA. THESE PRODUCTS ARE DESCRIBED AS BURGLAR RESISTANT.

Special classes, known as resistance classes RC1 –RC6, have been created to differentiate between these products. These classes are determined using test procedures, in which break-ins are simulated with a variety of different perpetrators.

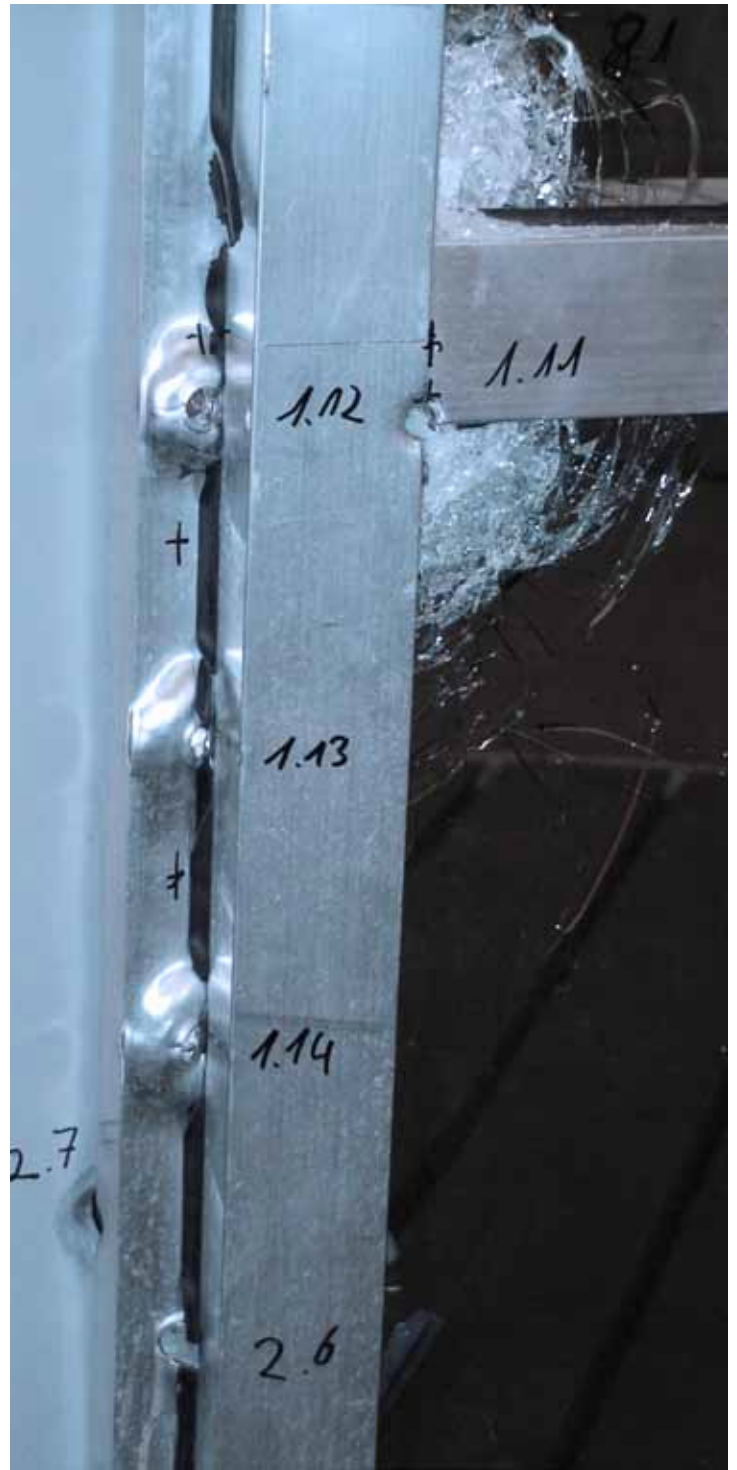
The present standards are:

- European standard EN 356 for testing and classifying security glazing, with a resistance to burglary.
- European standard EN 1627, for burglar resistance of windows, doors and shutters.

EN 1627 Burglary Resistance standard provides for three resistance tests:

- Resistance to static loading in accordance with standard EN 1628
- Resistance to dynamic loading in accordance with standard EN 1629
- Resistance to manual burglary attempts in accordance with standard EN 1630

Resistance Class (RC) or (WK)	Tools – Method used	Perpetrator	Resistance test time (min) per selected point on sample	Total resistance time (min) per sample
1	Kicking, pressing, jumping against. Little protection against levering	Vandalism		
2	Bodily force, simple tools e.g. screwdriver, shim, pliers	Opportunist	3	15
3	Additional second screwdriver and crowbar	Opportunist	5	20
4	Additional use of saw and tools such as axe and chisel, hammer, electric drill	Experienced perpetrator	10	30
5	Additional use of electric tools, such as drill, jigsaw or saber saw	Experienced perpetrator	15	40
6	Additional use of more powerful electric tools than WK5	Experienced perpetrator	20	50











BULLET RESISTANCE

BALLISTIC RESISTANCE EUROPEAN STANDARDS HAVE BEEN DEFINED BY A GROUP OF INTERNATIONAL EXPERTS, COMPOSED OF MANUFACTURERS, CONSUMERS, CONSULTANTS, ENGINEERS AND PUBLIC AUTHORITIES.

■ EN 1522 Windows, doors, shutters and blinds – resistance to ballistic attacks. Standard EN 1522 defines 7 resistance levels for pistols, rifles and assault rifles (FB1 to FB7) and for shotguns (FSG).

■ EN 1063 Security glazing – resistance to ballistic attacks European standard EN 1063 defines 7 resistance levels for pistols and for pistols and rifles (BR1 to BR7) and 2 for shotguns (SG1 and SG2).

	Class Threat Level	Type of Weapon	Calibre	Ammunition	Nº of Shots	Velocity (m/s)	Test Range (m)	Spacing (mm)
	FB1	Rifle	.22LR	L/RN	3	360+/- 10	10	120+/- 10
	FB2	Handgun	9mm Luger	FJ1/RN/SC	3	400+/- 10	5	120+/- 10
	FB3	Handgun	.357 Magnum	FJ1/CB/SC	3	430+/- 10	5	120+/- 10
	FB4	Handgun	.44 Rem Magnum	FJ2/FN/SC	3	440+/- 10	5	120+/- 10
	FB5	Rifle	.5.56x45	FJ2/PB/SCP 1	3	950+/- 10	10	120+/- 10
	FB6	Rifle	7.62x51	FJ1/PB/SC	3	830+/- 10	10	120+/- 10
	FB7	Rifle	7.62x51	FJ2/PB/HC 1	3	820+/- 10	10	120+/- 10
	FSG	Shot Gun	12/70	Solid Slug 3	3	420+/- 20	10	-

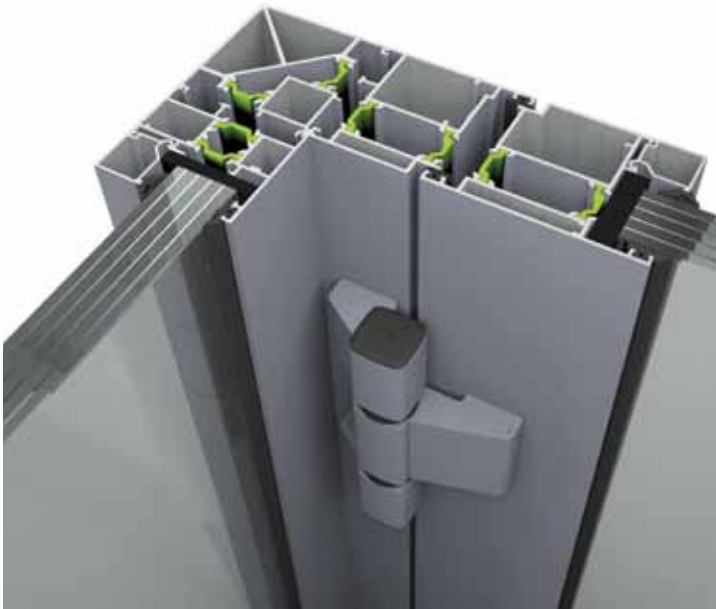
SYSTEMS FOR COMMERCIAL USE

CONTROLLED ENTRANCES

E2004

With thermal break:

Burglar Resistance RC2 (WK2) / RC3 (WK3)



CURTAIN WALL SYSTEMS

E85

System type: Stick Façade System

Burglar resistance: RC3 (WK3), RC4 (WK4)

Bullet Resistance: FB4, FB6



ECS

Energy Conservation Systems

MAIN ENTRANCES

E2004_{ECS}

Burglar resistance: RC2, RC3
Frame Depth: 67.5 mm



E2004

Burglar resistance: RC3
Frame depth: 63.5 mm



SYSTEMS FOR RESIDENTIAL USE

MAIN ENTRANCES

Burglar resistance: RC3
Thermal insulation: $U_{st} = 1.31 \text{ W/m}^2\text{K}$



OPENING SYSTEMS FOR DOORS AND WINDOWS

E77_{ECS}

Bullet resistance: FB6
Fixed frame (min depth): 100 mm
Thermal insulation: $U_f = 3.8 \text{ W/m}^2\text{K}$



ECS

Energy Conservation Systems

E45_{ECS}

Burglar resistance: RC2
Fixed Frame (min depth): 60 mm
Thermal insulation: $U_f=1.9 \text{ W/m}^2\text{K}$



SLIDING SYSTEMS FOR DOORS AND WINDOWS

E52_{ECS}

Burglar resistance: RC2
Sash (min depth): 38 mm
Thermal insulation: $U_f=3 \text{ W/m}^2\text{K}$



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