

# METAL FORM®

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# METAL FORM®

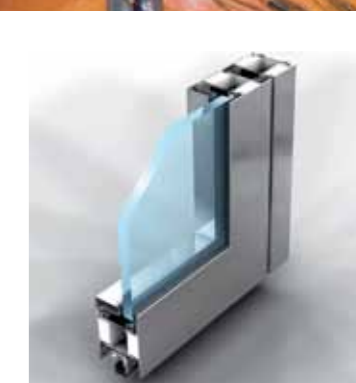
In partnership with

**rp**  
**technik**  
profile systems



## Fire protection systems

RP-hermetic 50 E(W) 30-120, RP-hermetic FINELINE E(W) 30,  
RP-hermetic 55N FP E(W) 30-60, RP-ISO-hermetic 70 FP EI 30-90,  
RP-ISO-hermetic EI 30-120, RP-ISO-hermetic 45N EI 30-120,  
RP-ISO-hermetic 60N EI 30-120



Windows, Doors, Partition  
walls & Curtain walls

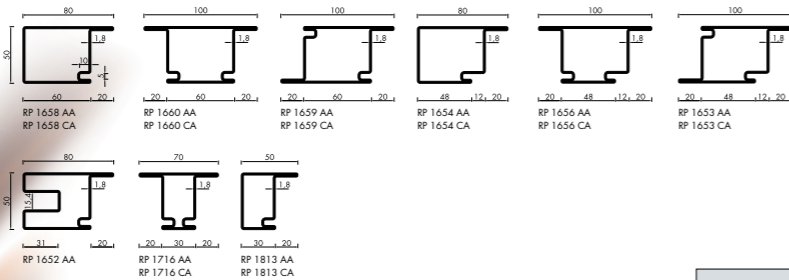


# Fire protection doors and partitions

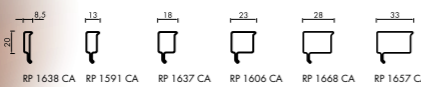
Profile overview



## RP-hermetic 50 E(W) 30-120

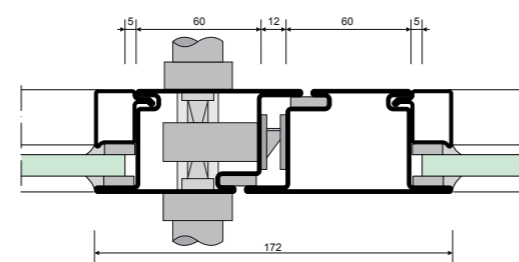
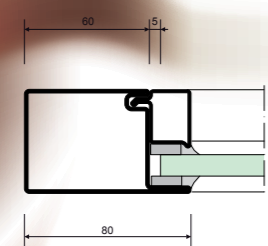


## Glazing beads



AA = steel S235 JR bright rolled, 6.000 mm  
 CA = steel continuously hot dip coated, 6.000 mm  
 CC = steel continuously hot dip coated, 5.000 mm  
 AA = stainless steel 1.4301 (304), surface raw material 28, 6.000 mm  
 XQ = stainless steel 1.4301 (304), surface raw material 28, 2.800 mm  
 ZA = stainless steel 1.4301 (304), outer surface ground, size 220-240, folded, 6.000 mm  
**Optional surface treatment for AA**  
 BA = galvanneal (Unit galvanizing), DIN EN ISO 1461, on both sides minimum 70 µm, 6.000 mm  
 DA = zinc-plated (blue/yellow chromed), DIN 50961, outer layer minimum 8 µm, 6.000 mm  
 AL = aluminium EN AW 6060, state T66, 6.000 mm

## RP-hermetic 50 E(W) 30-120



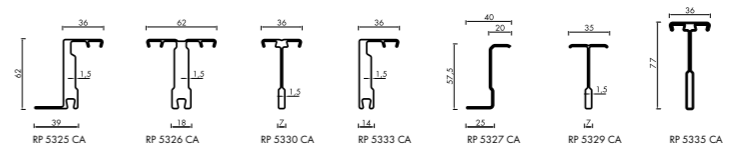
Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

# Fire protection partitions and openable windows

Profile overview



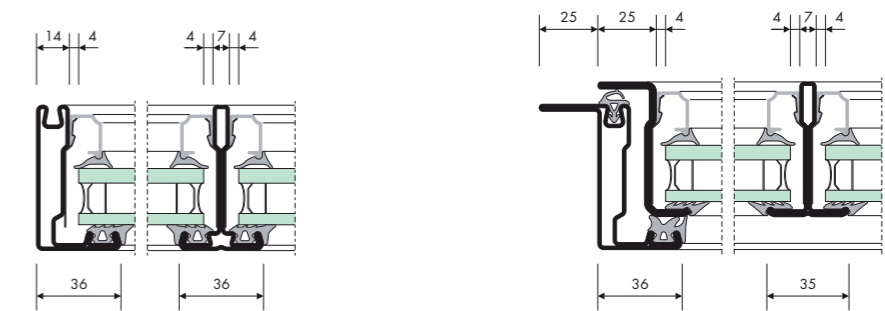
## RP-hermetic FINELINE E(W) 30



## Glazing beads

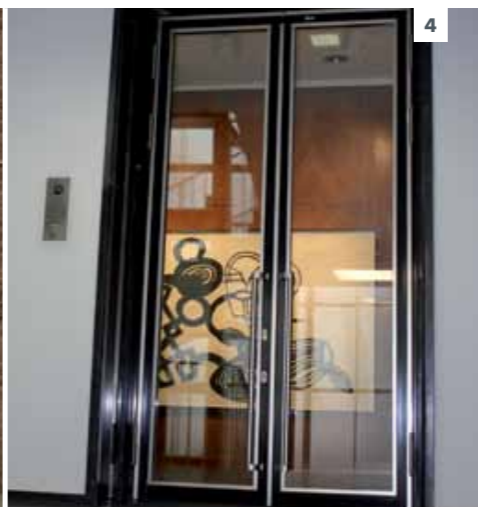


## RP-hermetic FINELINE E(W) 30



Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

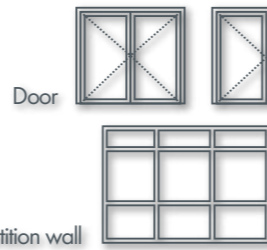
- 1 Fire test Pilkington, Gelsenkirchen, Germany
- 2 Designhotel, Kamen, Germany
- 3 Manufactum, Waltrip, Germany
- 4 Hansakontor Dortmund, Germany
- 5 Manufactum, Waltrip, Germany



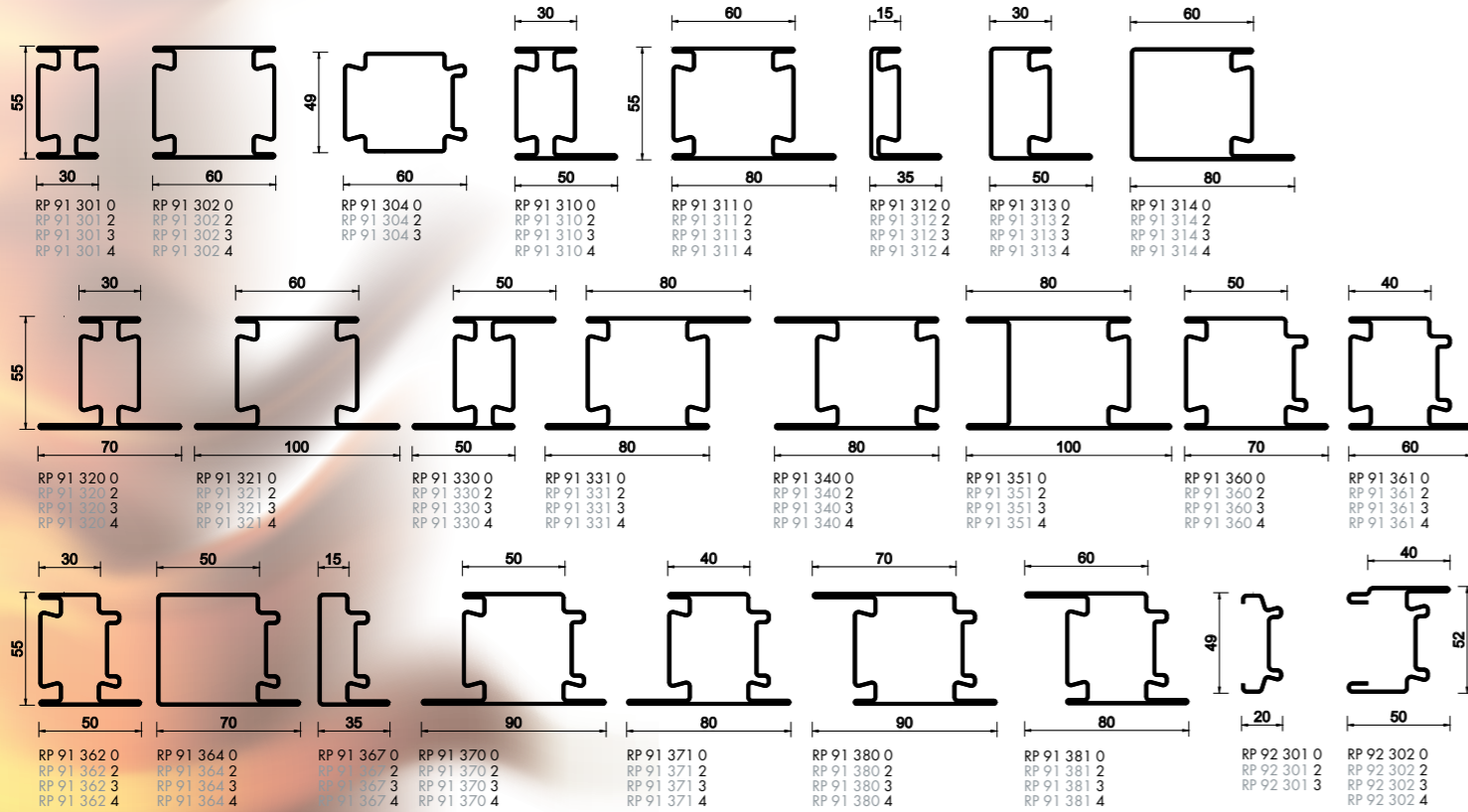


# RP-hermetic 55N FP E(W) 30-60

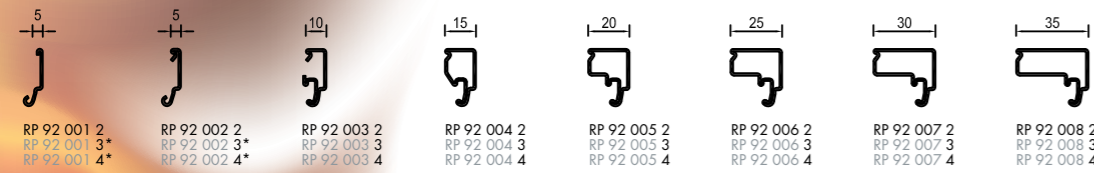
Profile overview



## RP-hermetic 55N FP E(W) 30-60



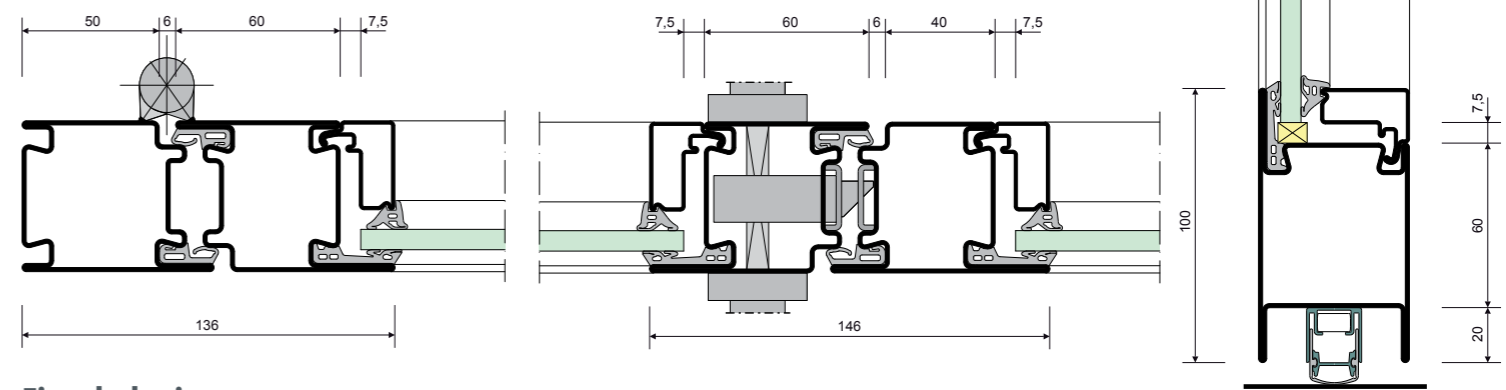
## Glazing beads



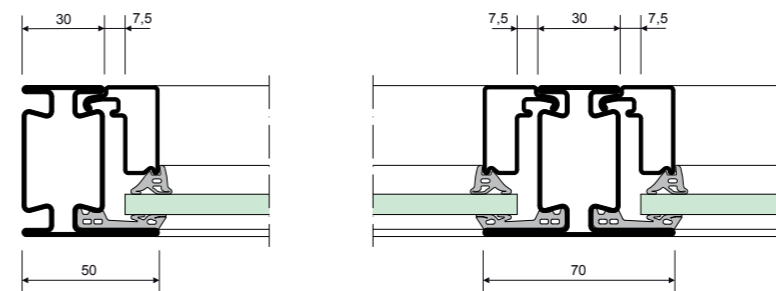
End digit 0 = steel S235JR, bright rolled, 6.000 mm  
 End digit 1 = aluminium EN AW 6060, state T66, 6.000 mm  
 End digit 2 = steel S280GD continuously hot-dip coated, 6.000 mm  
 End digit 3 = stainless steel, 1.4401 (316), surface raw material 2B, 6.000 mm  
 End digit 4 = stainless steel, 1.4401 (316), outer surfaces ground, size 400, folded, 6.000 mm  
 End digit 5 = Aluminium black  
 \*) = Price and delivery time on request

## RP-hermetic 55N FP E(W) 30-60

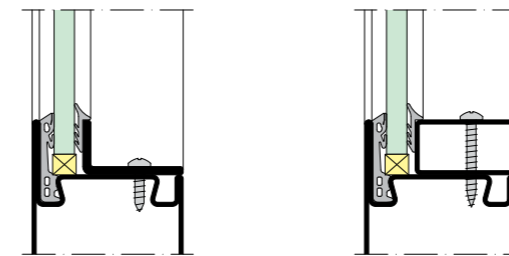
### Doors



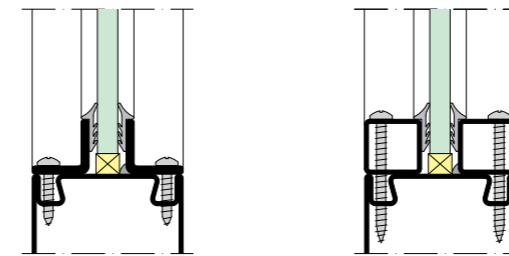
### Fixed glazing



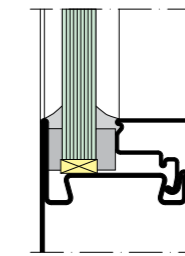
### Glazing - alternative stop



### Glazing - centered, alternative



### Glazing - alternative wet glazing



Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

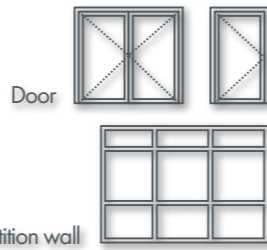


1 Fire test RP-hermetic 55N FP E(W) 30-60  
 2 Hospital St. Joseph, Duisburg, Germany

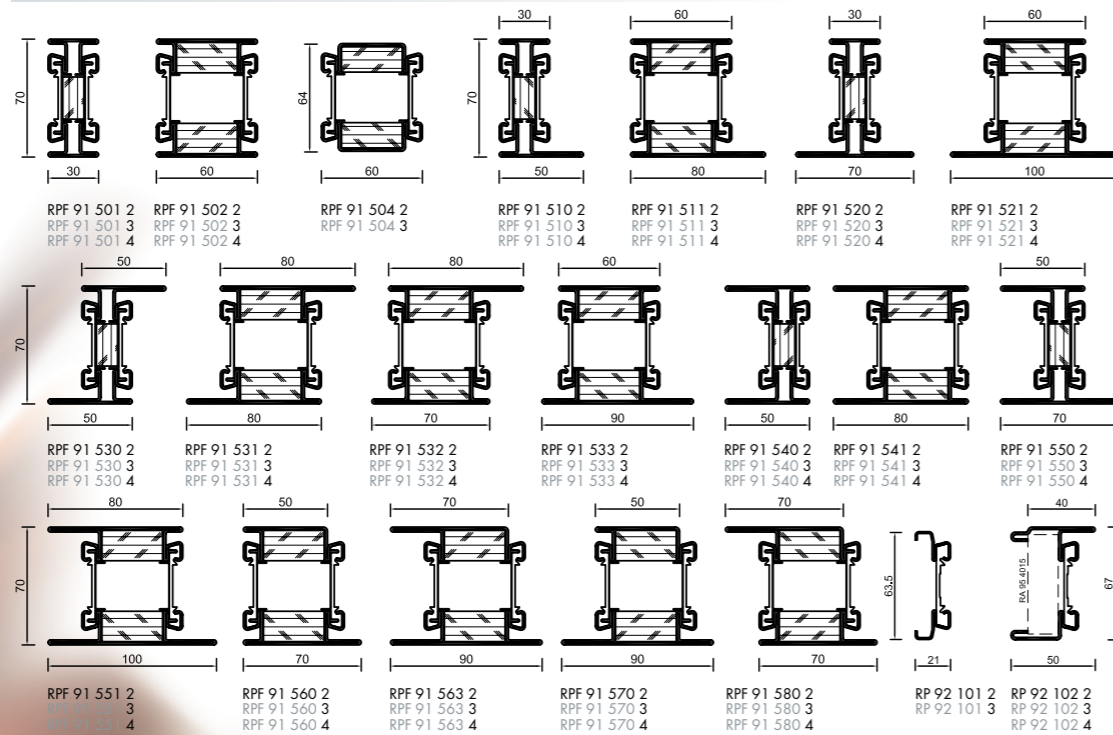


# RP-ISO-hermetic 70 FP EI 30

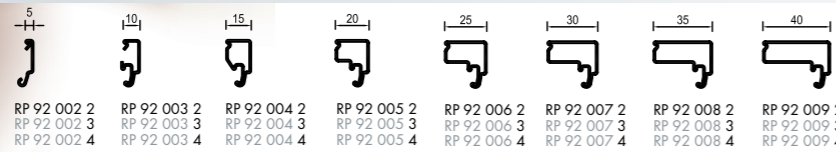
Profile overview



## RP-ISO-hermetic 70 FP EI 30



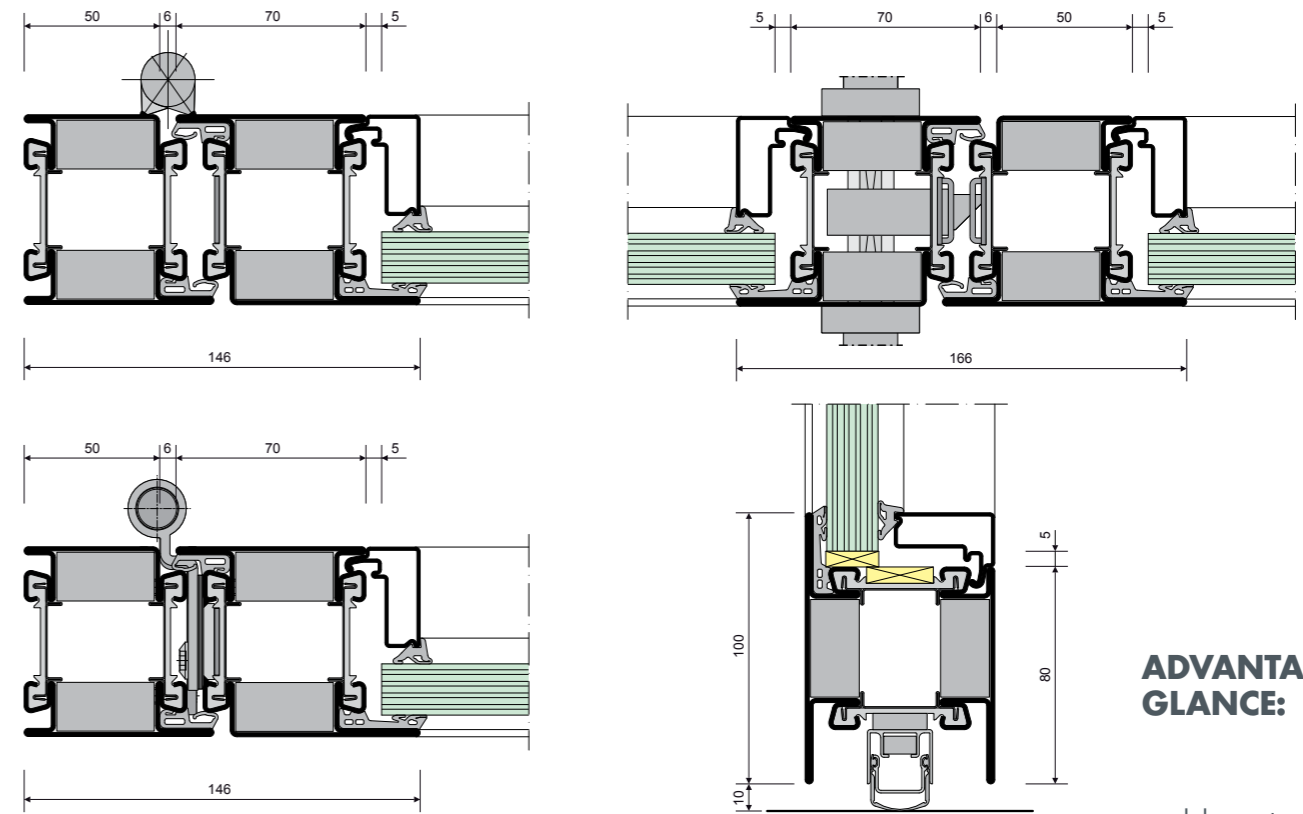
## Glazing beads



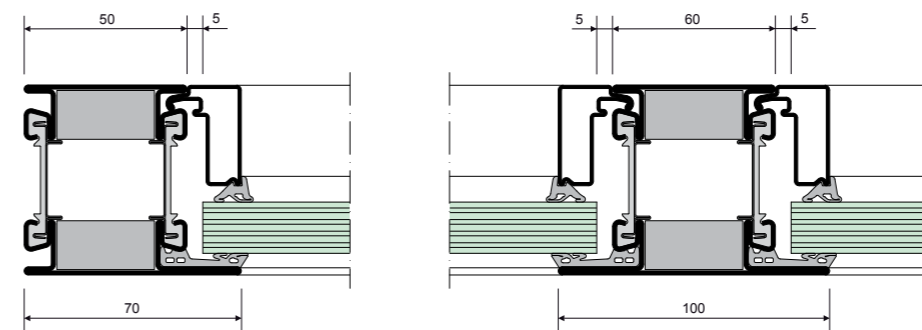
End digit 0 = steel S235JR, bright rolled, 6.000 mm  
 End digit 1 = aluminum EN AW 6060, state 166, 6.000 mm  
 End digit 2 = steel S280GD continuously hot-dip coated, 6.000 mm  
 End digit 3 = stainless steel, 1.4401 (316), surface raw material 28, 6.000 mm  
 End digit 4 = stainless steel, 1.4401 (316), outer surfaces ground, size 400, foiled, 6.000 mm

## RP-ISO-hermetic 70 FP EI 30

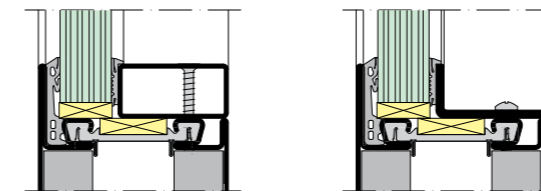
### Doors



### Fixed glazing



### Alternative glazing



## ADVANTAGES AT A GLANCE:

- modular system - one profile for all classifications!
- Realization in steel and stainless steel
- one profile for different fire resistant categories
  - classifications are achieved by using different isolators
  - uniform processing
- glazing bead stick-system
- same face width for doors and partition walls
- Doors: up to 54 mm filling thickness possible
- profiles are available with or without filling
- screwed square and rectangle profiles as well as angles as glazing beads possible

Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

- 1 Designhotel Kamen, Germany
- 2 Welser Profile, Bönen, Germany
- 3 Hansakontor, Dortmund, Germany
- 4-6 Fire test RP-ISO-hermetic 70 FP

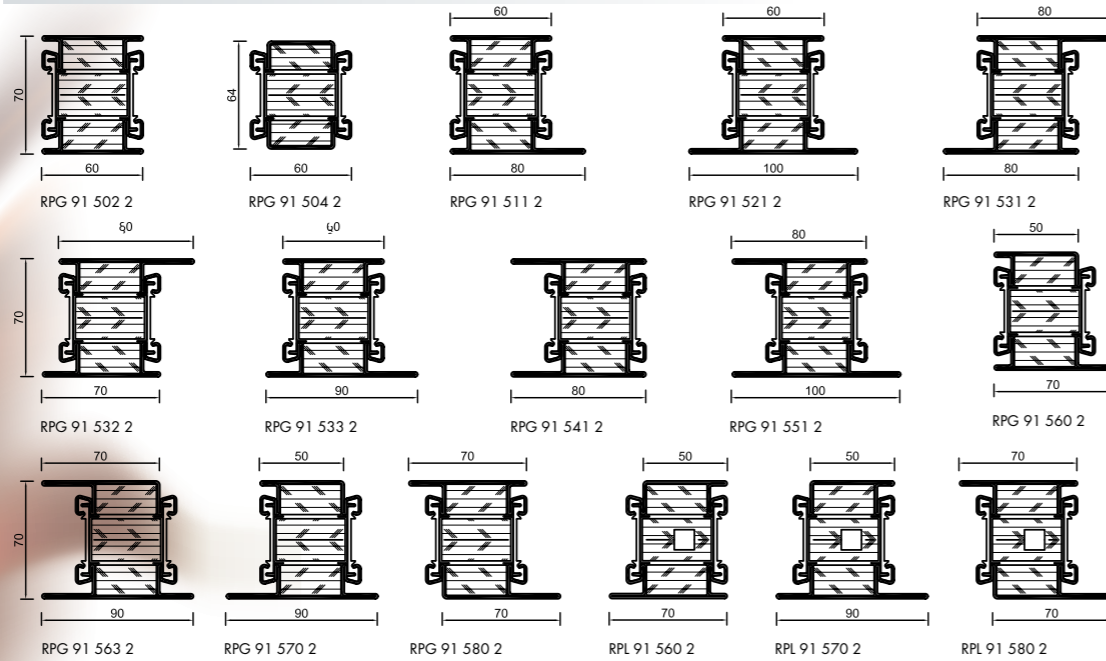




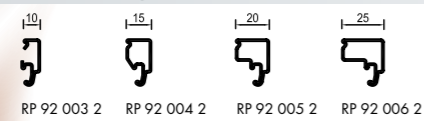
# RP-ISO-hermetic 70 FP EI 60/EI 90

Profile overview

## RP-ISO-hermetic 70 FP EI 60/EI 90



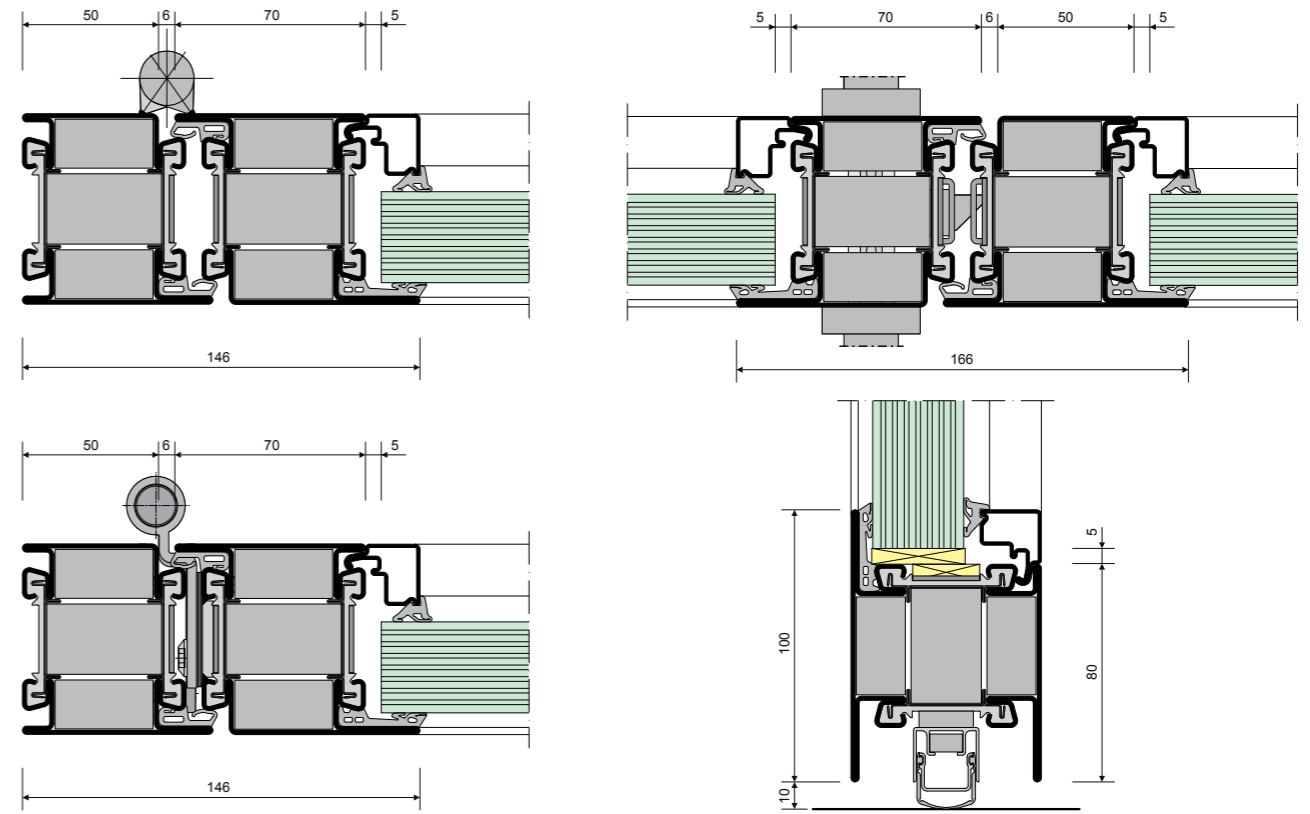
## Glazing beads



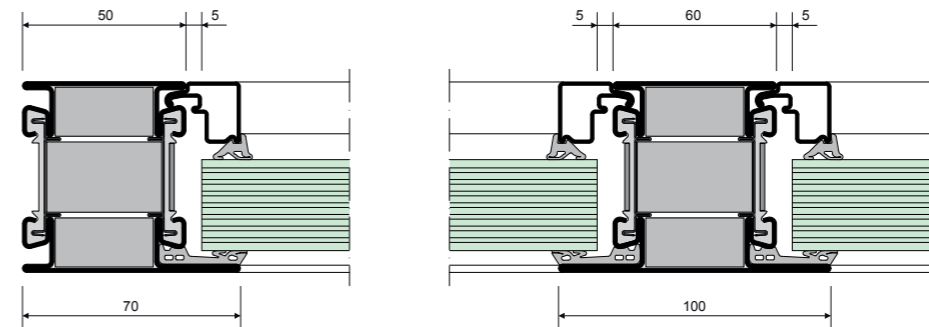
End digit 0 = steel S235JR, bright rolled, 6.000 mm  
 End digit 1 = aluminium EN AW 6060, state T66, 6.000 mm  
 End digit 2 = steel S280GD continuously hot-dip coated, 6.000 mm  
 End digit 3 = stainless steel, 1.4401 (316), surface raw material 28, 6.000 mm  
 End digit 4 = stainless steel, 1.4401 (316), outer surfaces ground, size 400, foiled, 6.000 mm

## RP-ISO-hermetic 70 FP EI 60/EI 90

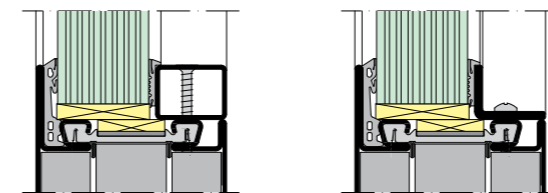
Door



Fixed glazing

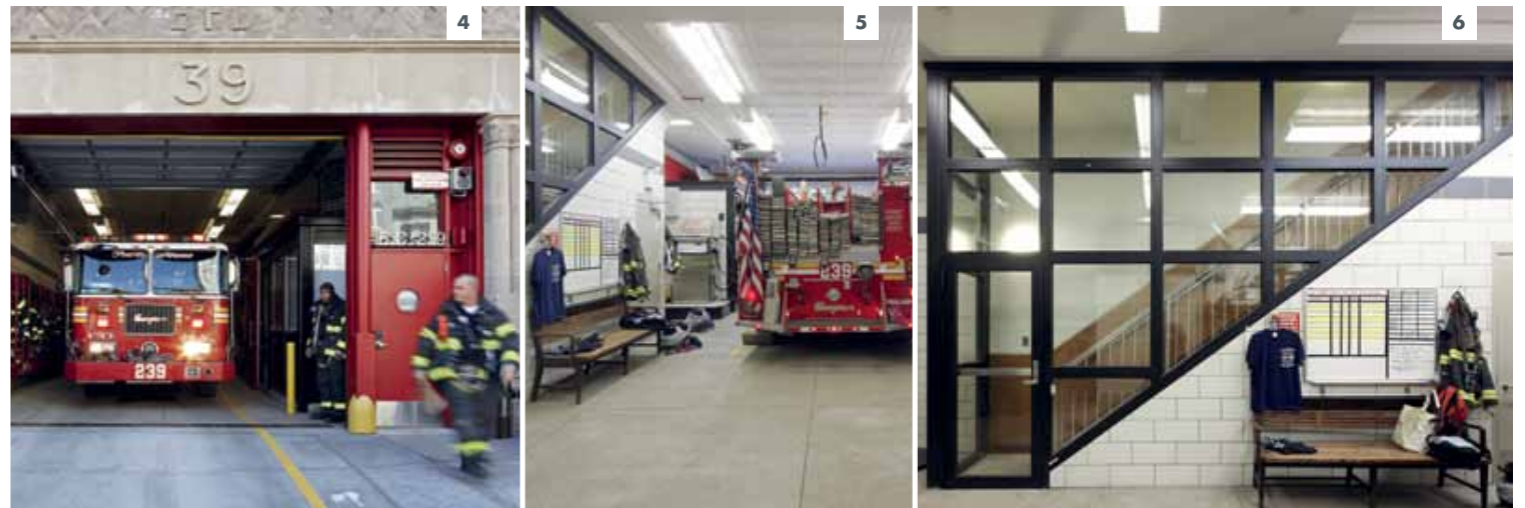


Alternative glazing



Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

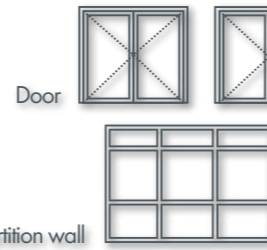
- 1 Montessori Primary School  
Moenchengladbach,  
Germany
- 2 Fire test Partition wall,  
Germany
- 3 Dubai Airport, UAE
- 4-6 Firestation New York, USA



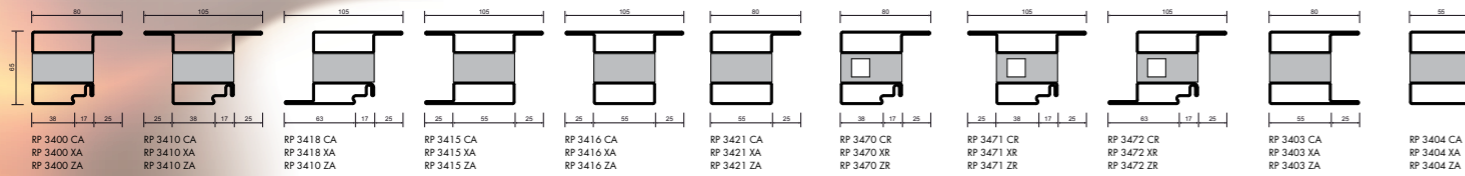


# Fire protection doors and partitions

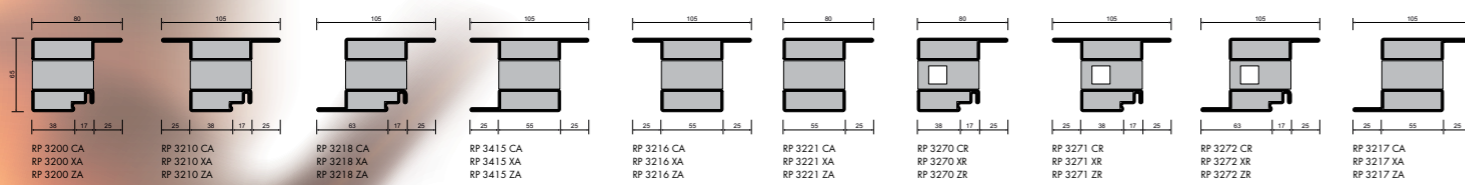
## Profile overview



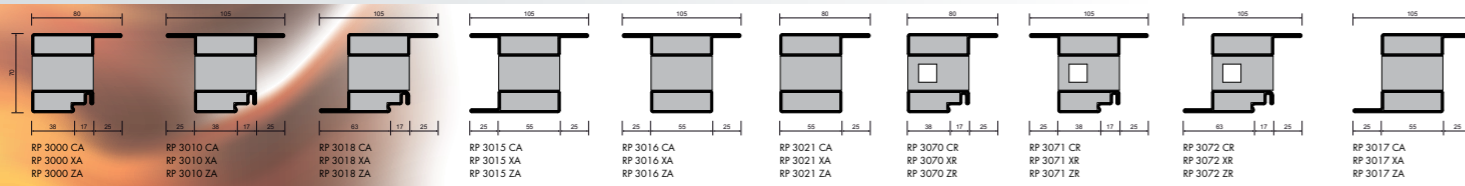
### RP-ISO-hermetic EI 30



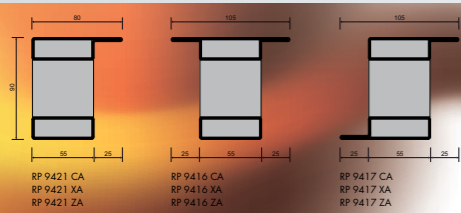
### RP-ISO-hermetic EI 60



### RP-ISO-hermetic EI 90



### RP-ISO-hermetic EI 120

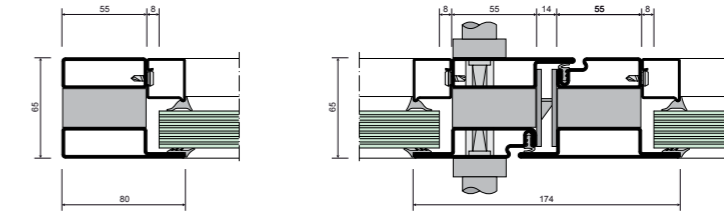


### Glazing beads

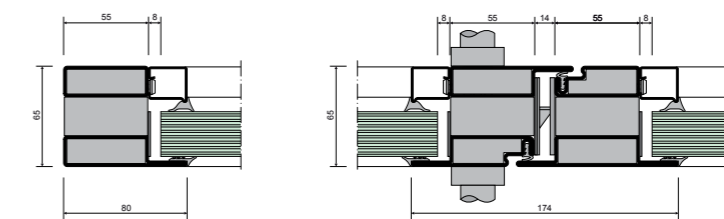


AA = steel S235 JR bright rolled, 6,000 mm  
 CA = steel continuously hot dip coated, 6,000 mm  
 CC = steel continuously hot dip coated, 5,000 mm  
 CR = steel continuously hot dip coated, 3,000 mm  
 XA = stainless steel 1.4301 (304), surface raw material 28, 6,000 mm  
 XR = stainless steel 1.4301 (304), surface raw material 28, 3,000 mm  
 XQ = stainless steel 1.4301 (304), surface raw material 28, 2,800 mm  
 ZA = stainless steel 1.4301 (304), outer surface ground, size 220-240, foiled, 6,000 mm  
 ZR = stainless steel 1.4301 (304), outer surface ground, size 220-240, foiled, 3,000 mm  
**Optional surface treatment for AA**  
 BA = galvanized (Unit galvanizing), DIN EN ISO 1461, on both sides minimum 70 µm, 6,000 mm  
 DA = zinc-plated (blue/yellow chromed), DIN 50961, outer layer minimum 8 µm, 6,000 mm  
 AL = aluminum EN AW 6060, state T66, 6,000 mm

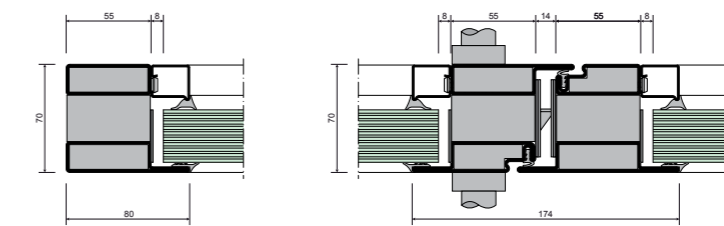
### RP-ISO-hermetic EI 30



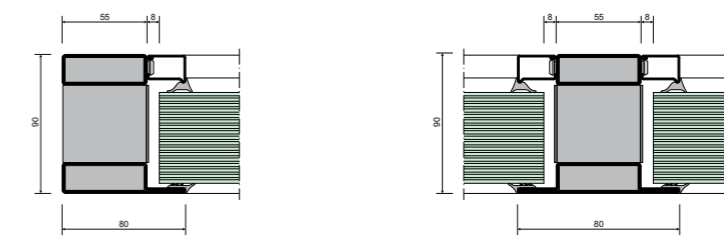
### RP-ISO-hermetic EI 60



### RP-ISO-hermetic EI 90



### RP-ISO-hermetic EI 120



### Transparent fire protection

- fabricated from steel and glass, protects against fire, smoke and radiant heat
- Classification EI 30 to EI 120

### The system

- stable closed profiles
- asbestos-free insulation
- economic

### The steel material

- high resistance capability
- long lasting and secure
- shockproof and stable
- environmentally friendly
- maintenance friendly
- pre-galvanized strip

### The architecture

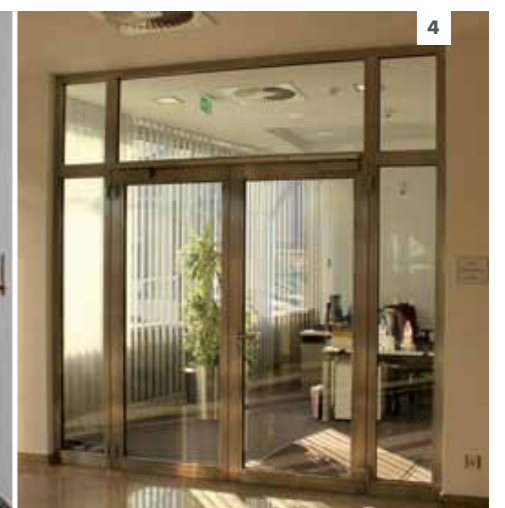
- flush fitting
- high transparency
- attractive design
- multi-functional

### The processing

- simple and economic
- high inherent stability frames
- manufacturing friendly wall thickness 1.8 mm
- screwed glazing bead systems
- dry and wet glazing

Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

- 1 Fire test, Germany
- 2 Hospital St. Joseph, Duisburg, Germany
- 3 Town hall, Germany
- 4 Welser Profile, Boenen, Germany



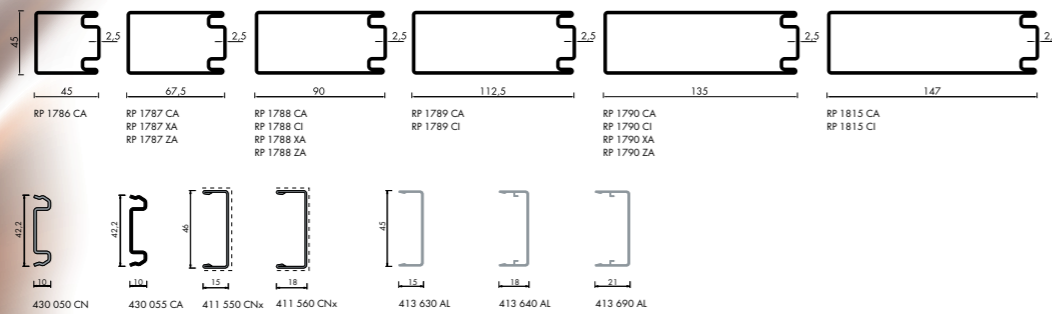


# Fire protection curtain walls

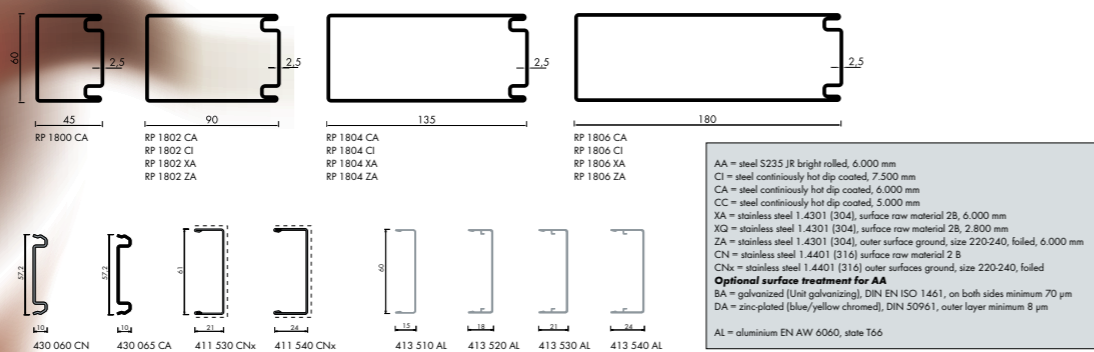
Profile overview



## RP-ISO-hermetic 45N EI 30-120

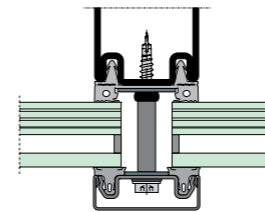


## RP-ISO-hermetic 60N EI 30-120

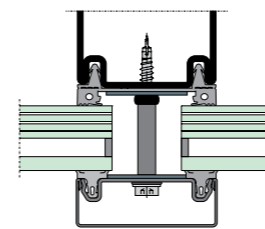


AA = steel S235 JR bright rolled, 6.000 mm  
 CI = steel continuously hot dip coated, 7.500 mm  
 CA = steel continuously hot dip coated, 6.000 mm  
 CC = steel continuously hot dip coated, 5.000 mm  
 XA = stainless steel 1.4301 (304), surface raw material 2B, 6.000 mm  
 XQ = stainless steel 1.4301 (304), surface raw material 2B, 2.800 mm  
 ZA = stainless steel 1.4301 (304), outer surface ground, size 220-240, foiled, 6.000 mm  
 CN = stainless steel 1.4401 (316) surface raw material 2 B  
 CNx = stainless steel 1.4401 (316) outer surfaces ground, size 220-240, foiled  
**Optional surface treatment for AA**  
 BA = galvanized (Unit galvanizing), DIN EN ISO 1461, on both sides minimum 70 µm  
 DA = zinc-plated (blue/yellow chromed), DIN 50961, outer layer minimum 8 µm  
 AL = aluminium EN AW 6060, state T66

## RP-ISO-hermetic 45N EI 30-120



## RP-ISO-hermetic 60N EI 30-120



## FIRE PROTECTION GLAZING IN A MULLION-TRANSOM CONSTRUCTION

The slim and multi-functional RP-curtain wall systems, with mullion-transom construction, together with their specially tested fireproof glazing, have a proven suitability for a range of fire retardation times up to 120 minutes. The structures can equally well be used for constructions over several stories, for curtain walls or as separating structures.

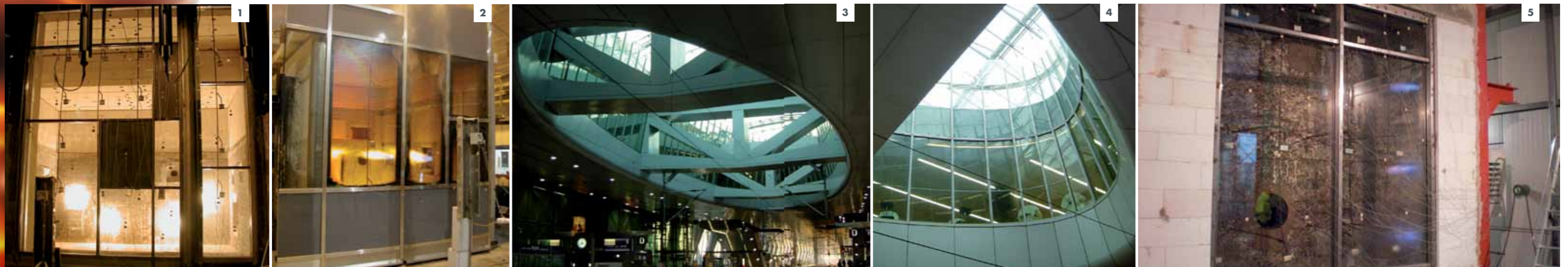
corrosion protection is guaranteed through complete (inside/outside) pre-galvanizing. A tested and proven sealing system with overlapping transom seals where they meet the mullions, guarantees a solution with a high degree of tightness for the internal seals and for the external glazing, giving an altogether high system tightness for external applications.

Through their narrow face widths of 45 to 60 mm, slim and transparent architectural requirements can be fulfilled, and this in combination with meeting high static requirements.

The fire protection characteristics are achieved by this construction alone, through the selection of filling elements and accessory components, without the need for additional measures. Different depths of building profile, from 45 to 180 mm, allow the greatest possible design variation. Fundamental

Application of glazing seals depends on glass type, classification, fire resistance period and corresponding approvals. National requirements have to be observed.

- 1 Fire test curtain wall, France
- 2 Fire test curtain wall, France
- 3 Train station Frankfurt, Germany
- 4 Train station Frankfurt, Germany
- 5 Fire test curtain wall RP-ISO-hermetic 45N EI 30-120



# High-quality service & dedicated support



**Health**  
Occupational safety and the protection of health are the mainstay of any successful enterprise. Our long-standing corporate principles reach far beyond the confines of accident prevention. Health and well-being are an unwavering concern of our company.



**Environmental protection**  
We are responsible for the environment we inhabit. A stable environment is key to our success as a company, both now and in future. Environmental protection, when practised on a daily basis, is a prerequisite for building our common future. For this to happen, all employees need to pull together in one direction.



**Quality**  
Seamless quality control at all stages of the production process are a sure-fire guarantee of RP Technik's commitment to unimpeachable quality when it comes to delivering impeccable high-grade profile systems.

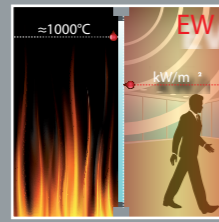
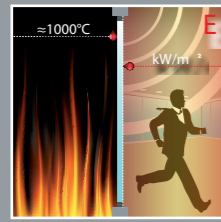


## A LONG-STANDING AND SUCCESSFUL PARTNERSHIP

Close partnership with customers, translated into practical, day-to-day cooperation is a solid foundation for success. RP Technik is your unwavering partner for the development of steel profiles. From architects to planners, our customers benefit from a plethora of skills offered by a group of specialists working for a company which is both an expert in its field and active on the world stage. Insider knowledge of the industry and the full panoply of experience garnered from years of developing steel profiles mean partners of RP Technik have a clear advantage on the world markets, our unrelenting focus being on personal safety and building protection.

Profile systems	Curtain walls	Add-on curtain wall system	Doors	Partition walls	Windows	Sliding elements	Evidence	National requirements, directives and building regulations specific to the various Federal States must be observed while taking into account evidence garnered from tests and any approvals related thereto.
RP-ISO-hermetic 45N	●							
RP-ISO-hermetic 60N	●							
RP-tec 55	●							
RP MULTITOP 50/60 Outlet	●							
RP-tec 50-1	●							
RP-tec 55-1	●							
RP-tec 50-1 HA	●							
RP-tec 55-1 HA	●							
RP-tec 50-1 HA plus	●							
RP-tec 55-1 HA plus	●							
RP-tec 60-1	●							
RP-tec 60-1 HA	●							
RP-tec 80-1	●							
RP-tec 80-1 HA	●							
RP-ISO-hermetic 70		●	●					
RP-ISO-hermetic 70				●				
RP-ISO-hermetic 70 plus		●	●					
RP-ISO-hermetic 70 plus				●				
RP-hermetic FINELINE			●	●				
RP-hermetic 40			●	●				
RP-Design 50			●	●				
RP-hermetic 50		●	●					
RP-hermetic 55N		●	●					
RP-hermetic 55N				●				
RPhermetic 55N FP		●	●					
RP-hermetic 75		●	●					
RP-hermetic 75 FB		●	●					
RP-ISO-hermetic EI 30		●	●					





In the event of a fire, the fire separating function must be preserved and so prevent the spread of flames and smoke, for the specified period. Apart from these fundamental characteristics, components, which possess an EI classification, must maintain the surface temperature on the glass and frameworks, on the side facing away from the fire, on average, at not more than 140 K above the initial temperature. Furthermore, at no point may the rise in temperature be higher than 180 K. This ensures the protection of people and property in the neighbouring rooms for an appropriate period of time, and makes possible a safe evacuation of the building concerned in the intermediate time.

In contrast to EI classified components, these fire separation elements only provide basic protection from flames and smoke. In the event of a fire, radiant heat transmission is largely unobstructed, so that people can only remain for a short time near the side facing away from the fire, i.e. in neighbouring rooms. Furnishings, located in the proximity of such constructions, may catch fire because of the unhindered heat radiation - and will thus contribute to the further propagation of the fire.

In addition to the characteristics of E classified components, fire protection closures must reduce the transmission of heat radiation, meeting EW requirements. At a distance of 1 m from the relevant component, the radiant heat at the end of the specified period may not exceed more than 15 kW/m² on the opposite side to the fire. Thus, a relatively safe path for pedestrians can be assured along escape and emergency routes.



Fire protection certificates	1-leaf doors	2-leaf doors	window	partitions	curtain walls
RP-hermetic 50 E(W) 30-120	●	●		●	
RP-hermetic FINELINE E(W) 30			●	●	
RP-hermetic 55N FP E(W) 30-60	●	●		●	
RP-ISO-hermetic 70 FP EI 30	●	●		●	
RP-ISO-hermetic 70 FP EI 60/EI 90	●	●		●	
RP-ISO-hermetic EI 30	●	●		●	
RP-ISO-hermetic EI 60	●	●		●	
RP-ISO-hermetic EI 90	●	●		●	
RP-ISO-hermetic EI 120				●	
RP-ISO-hermetic 45N EI 30-120					●
RP-ISO-hermetic 60N EI 30-120					●

When putting together applications, the respective national requirements, guidelines and building regulations of the country concerned must be observed with consideration of the available test certificates and their approval.

# METAL FORM®

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