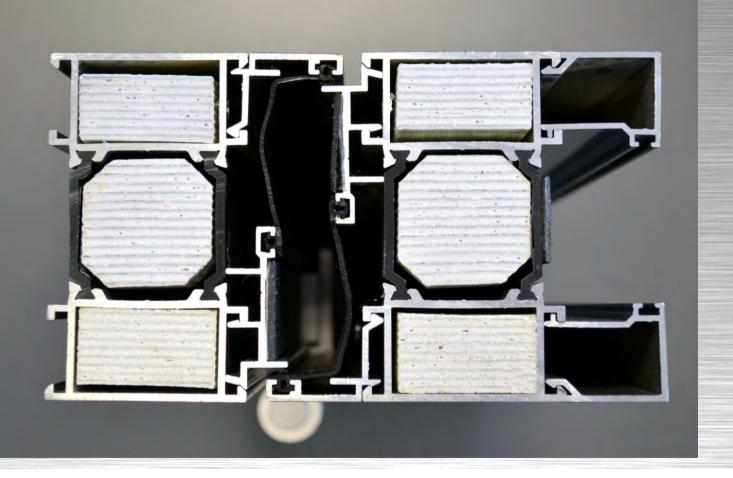


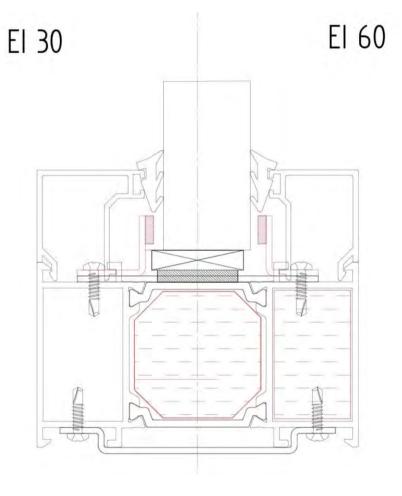
ALUFIRE PRODUCTS MATERIALS

- ALUMINIUM
- **OTHERMAL BREAK**
- PLASTER INSERTS
- EPDM GASKET
- GLASS
- ALUMINIUM PANEL
- ACCESORIES

ALUFIRE PRODUCTS MATERIALS

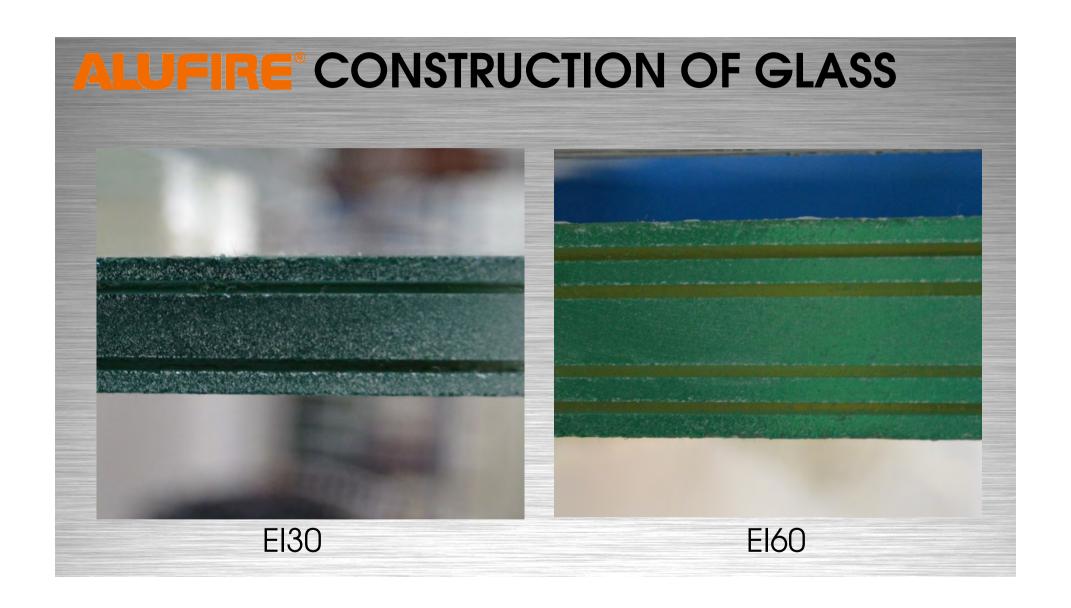


ALUFIRE® JOINERY MATERIALS



ALUFIRE CONSTRUCTION OF PANEL





ALUFIRE® GLASS PROTECTION

CORK SPACERS
PCV STRIPES







STANDARD PACKAGING FOR TRANSPORTATION







PACKAGING FOR EXPORT AND TRANSPORTATION





ALUFIRE GLASS PROTECTION

DELIVERED GLASS MUST BE PROTECTED AGAINST:

- •MECHANICAL DAMAGE
- EFFECTS OF WEATHER CONDITIONS INCLUDING UV RAYS, RAIN AND SNOW
- MOISTURE
- **OHIGH AND LOW TEMPERATURES**

ALUFIRE INSTALLATION TEMPERATURE

| GLASS MANUFACTURER | MINIMUM (°C) | MAXIMUM (ºC) |
|-----------------------|--------------|--------------|
| AGC | -40 | +40 |
| PILKINGTON | -40 | +50 |
| SAINT-GOBAIN | -10 | +45 |



GLASS TRANSPORT AND STORAGE ON-SITE

- RODUCTS PACKED AND SECURED IN FACTORY IS
 TRANSPORTED BY THE MANUFACTURER TO THE SITE
- FROM THAT MOMENT, YOU TAKE RESPONSIBILITY FOR THE PRODUCT
- YOUR RESPONSIBILITIES INCLUDE CORRECT TRANSPORT AND PROTECIOTN OF THE PRODUCT ON-SITE
- SPECIAL ATTENTION SHOULD BE PAID TO THE GLASS



GLASS TRANSPORT AND STORAGE ON-SITE

WAYS TO SORE AND TRANSPORT GLASS ON-SITE









GLASS TRANSPORT AND STORAGE ON-SITE





ALUFIRE®

TOOLS

- HAMMER DRILL
- DRILL
- CORDLESS DRILL
- BUBBLE LEVEL
- MEASURE
- RUBBER HAMMER
- HAMMER
- WEDGES AND WOODEN PADS
- RIVER NUTS INSTALLER





ALUFIRE® PREPARING FOR INSTALLATION

HOLE INSPECTION

- DIMENSIONS (CLEARANCE 10-30MM)
- HOLE DIAGONAL (MAX 10MM DIFFERENCE)
- FLOOR LEVEL

NOTE: INSTALLATION OF ALUFIRE PRODUCTS IS POSSIBLE ONLY BY MECHANICAL WAY

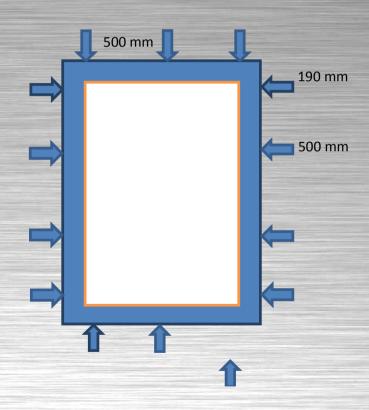


PRE - DRILLING

SCREW LOCATION:

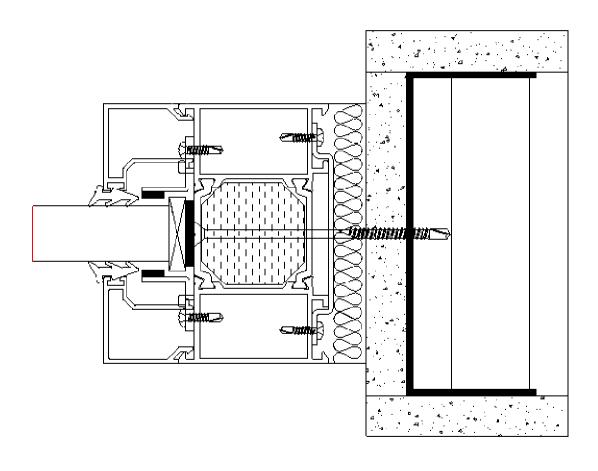
- DISTANCE FROM CORNERS
 MAX 190 MM
- DISTANCE BETWEEN SCREWS

 MAX 500 MM



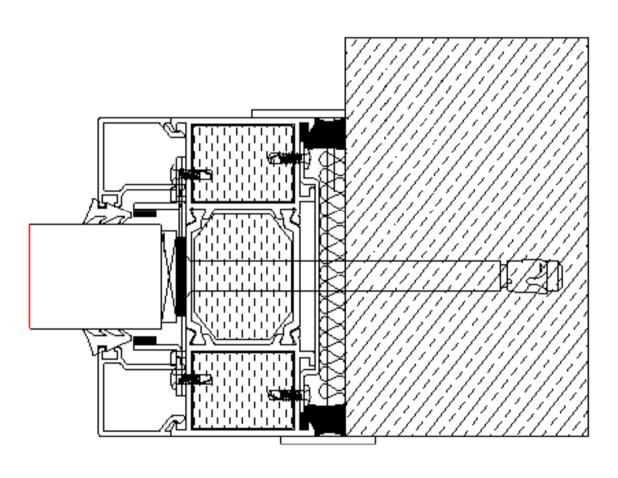


ALUFIRE PLASTER BOARD WALL





SOLID WALL

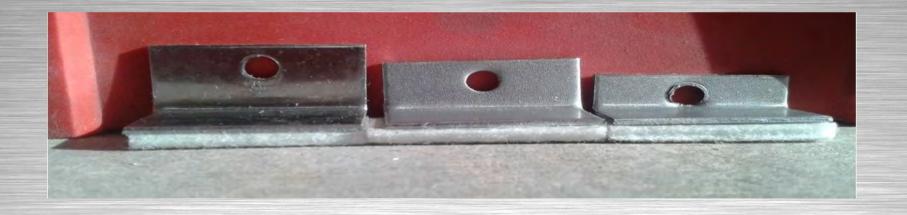


ALUFIRE INSTALLATION MATERIALS

| | ROCKWOOL (MIN.70 KG/M3) | SOUDAFOAM FR BY SOUDAL | GREAT STUFF BY DOW | BBS-9802 NBS BY DEN BRAVEN | NULLFIRE FF 197 1K-P BY ILLBRUCK |
|--------------------|-------------------------------|---------------------------|-----------------------|----------------------------------|--|
| DOORS | X | X | X | X | NO |
| EI15, EI30 WALL | X | X | X | X | X |
| EI45, EI60 WALL | X | X | X | NO | NO |
| EI120 WALL | X | NO | NO | NO | NO |



VARIOUS STEEL BRACKETS WITH FELT PADS PROVIDED BY ALUFIRE SHOULD BE USED FOR INSTALLATION OF GLASS IN THE FRAME

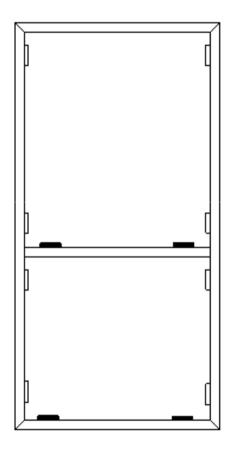


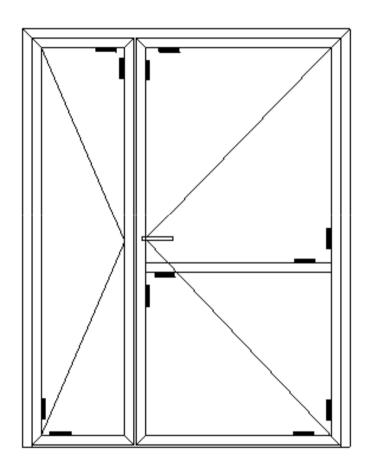
ALUFIRE STEEL BRACKETS

| INTERNAL USE | | | | EXTERNAL USE | |
|--------------|---------|-------|---------|--------------|--------------|
| GLASS | BRACKET | PANEL | BRACKET | GLASS | BRACKET |
| EI15 | 22 | | | EI15 | 17 |
| EI30 | 17 | EI30 | 13 | El30 | 13 |
| El45 | 17 | | | El45 | 13 |
| El60 | 13 | El60 | 13 | EI60 | 13 (48mm-10) |
| EI120 | 11 | EI120 | 11 | EI120 | 11 |



ALUFIRE® WOODEN PADS





Supportive pads

Protective pads

ALUFIRE EXTERNAL GLASS INSTALLATION

PLEASE MAKE SURE TO INSTALL THE FIREPROOF GLASS INSIDE THE BUILDING.

INSTALLING A FIREPROOF
GLASS ON OUTSIDE OF THE
BUILDING MAY DAMAGE THE
GLASS.

PLEASE INSTALL AS DESCRIBED ON LABEL ON THE GLASS.

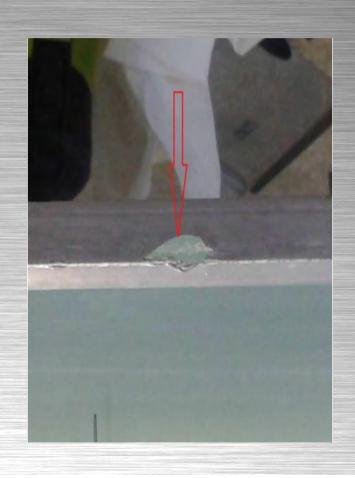
Tą stroną do wewnątrz Nie montować z uszkodzoną taśmą



Side to be turned towards the inside Do not install with damage tape

ALUFIRE GLASS INSTALLATION

THE EDGES OF THE FIREPROOF GLASS ARE PROTECTED BY A SPECIAL PROTECTIVE TAPE. DAMAGING IT OR REMOVING THE PROTECTIVE TAPE CAN CAUSE PERMANENT DAMAGE TO THE GLASS!



ALUFIRE GLASS INSTALLATION

SOME KINDS OF FIREPROOF GLASS HAVE A PRECISE "UP / DOWN" ORIENTATION. INCORRECT INSTALLATION MAY DAMAGE
THE FIREPROOF GLASS.
DAMAGE ARE NOT SUBJECT TO WARRANTY.



ALUFIRE DOOR ACCESORIES

- HANDLE
- CYLINDER LOCK
- DOOR CLOSER
- CLOSING SEQUENCE CONTROLLER
- ELECTROMAGNETIC HOLDERS
- MAGNETIC DOOR LOCK



ALUFIRE COMMON MISTAKES

THE CONSEQUENCES OF INSTALLATION ERRORS

- GLASS DAMAGE
- PROFILE DAMAGE
- ONO STABILITY
- **ONO FIRE PROTECTION**
- **ONO WARRANTY**



ALUFIRE INCORRECT INSTALLATION OF EXTERNAL GLASS

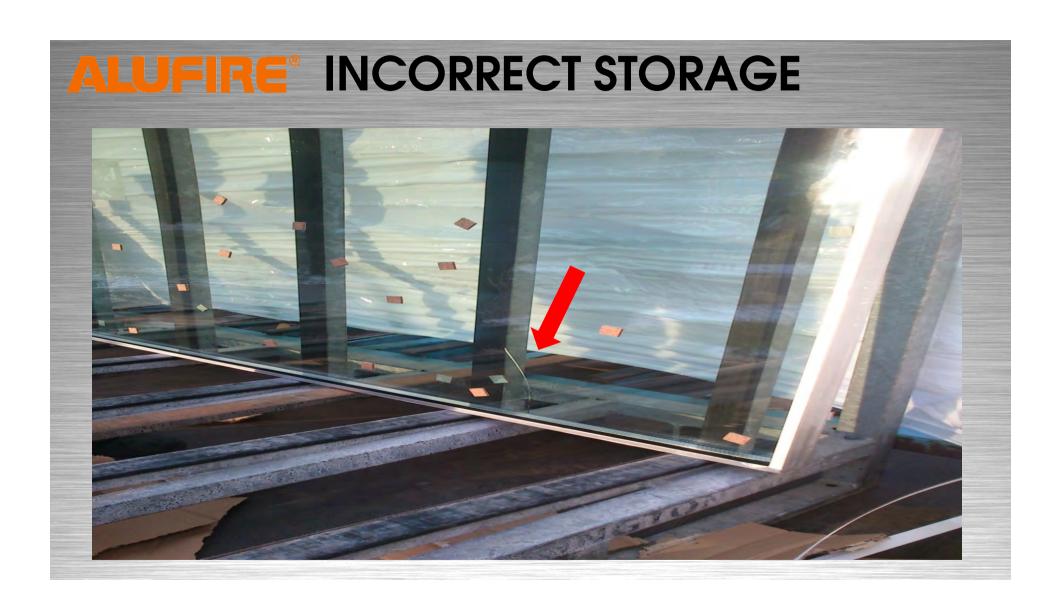


ALUFIRE INCORRECT INSTALLATION OF EXTERNAL GLASS



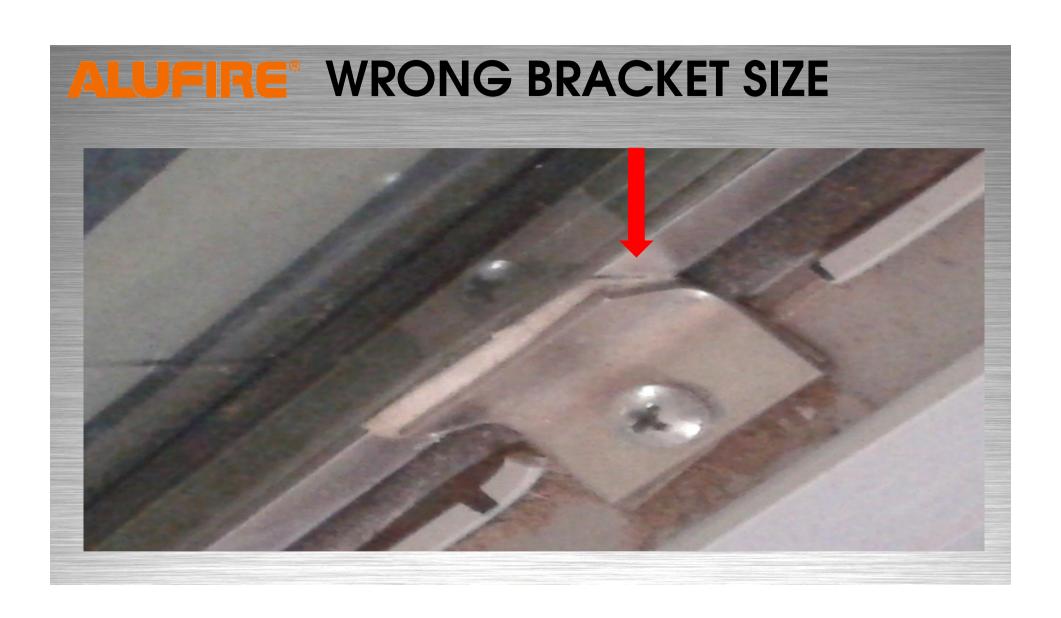
ALUFIRE INCORRECT INSTALLATION OF EXTERNAL GLASS





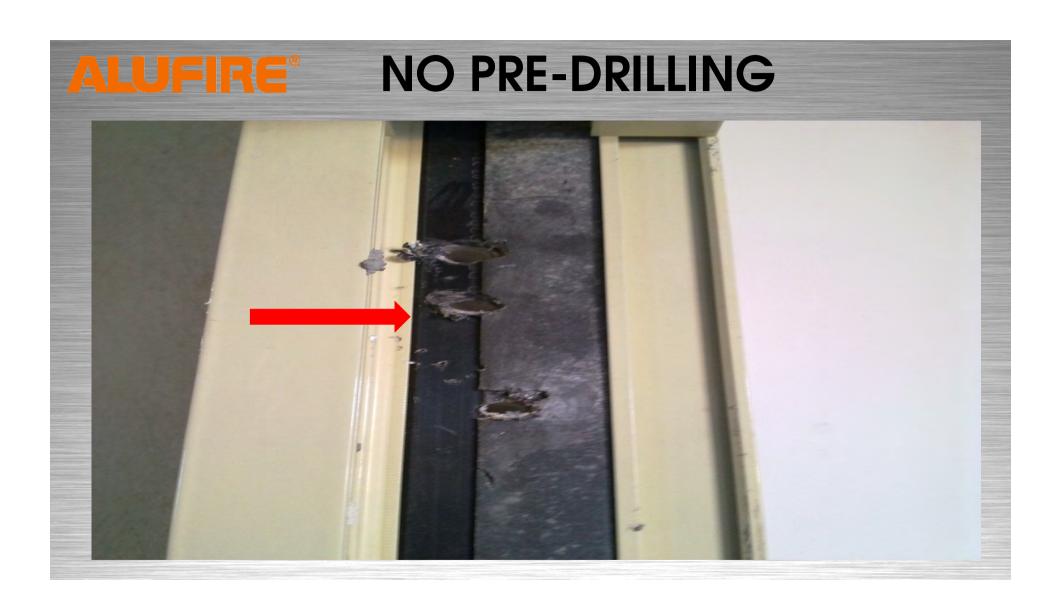




















ALUFIRE® THERMAL DAMAGE

MOST COMMON THERMAL DAMAGES ARE CAUSED BY:

- ANY SOURCES OF HIGH TEMPERATURE E.G PORTABLE ELECTRIC FAN HEATERS
- HEATERS
- ELECTRIC KETTLES
- HALOGEN LIGHTS



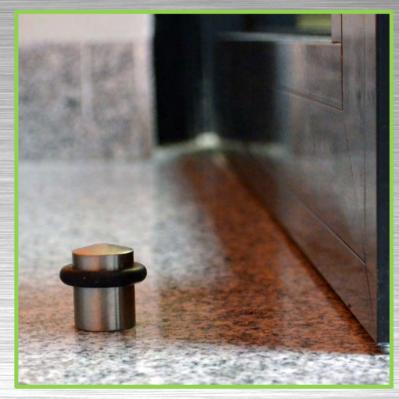


ALUFIRE WRONG HOLE PREPARATION



ALUFIRE INCORRECTLY INSTALLED DOOR BUMPER



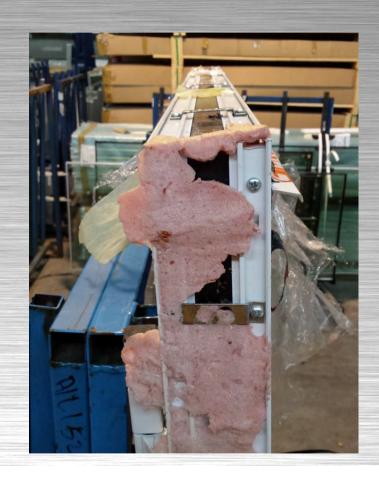






LACK OF FOAM















THANK YOU FOR YOUR ATTENTION