

## Series ESK / ESB

**Sandwich construction 20 mm, 40 mm and 80 mm**

**Thermal conductivity k: 1,2 W/m<sup>2</sup>K at ESK-20 : 0,75 W/m<sup>2</sup>K at ESK-40 : 0,35 W/m<sup>2</sup>K at ESK-80**

- Self-supporting, frameless construction built with separate components, torsion resistant, corrosion and seawater resistant
- Variable design in width, depth and height according to a grating measurement
- Enlargement possible, interchangeable single components, assembly on site possible
- Outstanding thermal insulation through the double shelled sandwich construction
- Gelcoat surface for extreme life span, colour RAL 7035
- 1-leaf doors (protective system IP 65), 2-leaf doors (protective system IP 54) with precise functioning closures possible
- Door frame with sturdy hinges, both made of stainless steel, door opening angle 180°
- Doors with 3-point latching and handle (closure no. 0513), panic function, half profile cylinder
- Threaded inserts M10 made of stainless steel inside all wall components
- Rigid base frame construction made of stainless steel, height 80/100 mm, designed for high load capacities
- Traversable roof components, self-supporting up to 4100 mm; designed for snowload of 75 kg/m<sup>2</sup> and manload of 100 kg/m<sup>2</sup> excess length of roof 50 mm all around
- Different floor designs as extra equipment

### Manufacturing Program:

#### ESK-20 pages 5.01 up to 5.03

Wall thickness 20 mm

cabinet height h: 2140 mm (wall component 2020 mm)  
2540 mm (wall component 2420 mm)  
2940 mm (wall component 2820 mm)

base frame 80 mm, traversable floor

cabinet width/depth: standardized measures 500/1000 mm

Door components (20 mm):

960 mm (inside diameter 874 x 1940 mm, 1 leaf)  
960 mm (inside diameter 874 x 2100 mm, 1 leaf)  
1460 mm (inside diameter 1374 x 1940 mm, 2 leaves)  
1960 mm (inside diameter 1874 x 1940 mm, 2 leaves)

#### ESK-40 pages 5.04 up to 5.05

Wall thickness 40 mm

cabinet height h: 2240 mm (wall component 2100 mm)  
2560 mm (wall component 2420 mm)  
3240 mm (wall component 3100 mm)  
4240 mm (wall component 4100 mm)

base frame 100 mm, traversable floor

cabinet width/depth: standardized measures 1000 mm

Door components (40 mm):

960 mm (inside diameter 870 x 2095 mm, 1- leaf)

#### ESK-80 pages 5.06 up to 5.08

Wall thickness 80 mm

cabinet height h: 2600 mm (wall component 2420 mm)  
3000 mm (wall component 2820 mm)

floor/frame 100 mm, traversable

cabinet width/depth: standardized measures 500/1000 mm

Door components (80 mm):

1025 mm (inside diameter 940 x 2045 mm, 1 leaf)

#### ESB page 5.09

Cabinets in modular design made of aluminium and stainless steel

Sandwich construction, wall thickness 40 mm,  
thermal conductivity k = 1.2 W/m<sup>2</sup>K

### Order Example:

#### Cabinet model ESK-20 2540-3000-1500

ESK = series, 20 = wall thickness (mm), 2540 = height over all (mm, floor traversable), 3000 = width (mm), 1500 = depth (mm); doors and extra equipment according to separate specification

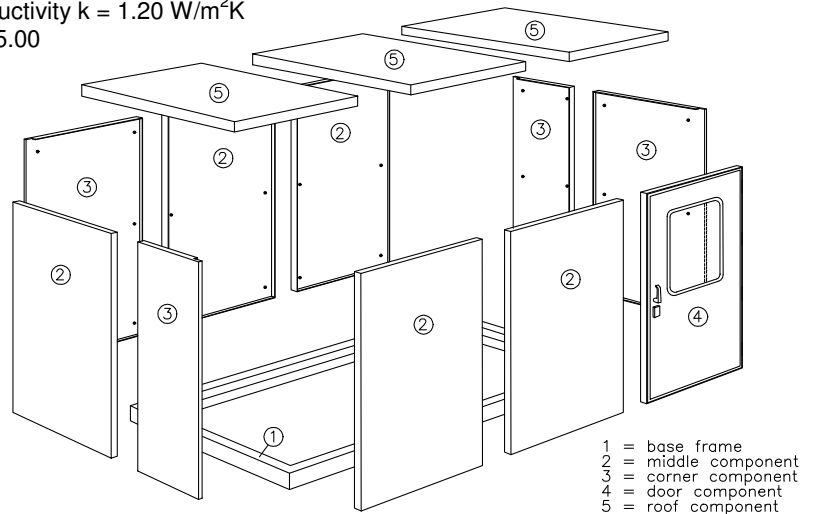


### Extra Equipment ESK:

- Other dimensions and designs on request
- Other RAL colour tone
- Reduced electrical surface resistance in accordance with EN 60079-0 (<10<sup>9</sup> Ω), mandatory option for hazardous areas (explosion protection)
- Profile-rubber sealed observation window made of laminated safety glass or acrylic glass in the door or wall components
- Double-pane equipped window
- Other closure variations (see „Accessories“)
- Door stop by pressurized spring (see „Accessories“)
- Door closer
- Electrical heating in normal and ex-proof design (see „Heating systems“)
- Cabinet ventilation systems (see „Accessories“)
- Mounting plate, sheet steel 2,5 mm, galvanized (see „Accessories“)
- Assembly rack, C-formed steel, galvanized (see „Accessories“)
- Lighting sets
- Air conditioning units
- Ventilators
- Holes with or without covering; single layer areas
- Lifting eye bolts (see „Accessories“)
- Lifting and fixing brackets made of stainless steel at base frame (see „Accessories“)
- Other designs for base frame and floor
- Longer excess length of roof
- Sluiceways and porches on request
- Integrated gas bottle cabinets on request
- Installation of customer's equipment on request and delivery

# ESK-20

Sandwich component construction, thermal conductivity  $k = 1.20 \text{ W/m}^2\text{K}$   
Other technical data and extra equipment: page 5.00  
and following pages



### Principle of Construction

Floor, walls and roof are assembled with component parts. On this way single components are interchangeable, easy to enlarge and assembly can be done on site.

### Plan View

Cabinet width  $w$  and depth  $d$ :  
Standardized measures 500 / 1000 mm  
(Depth  $d$  self-supporting up to 4000 mm)

Door components (20 mm):

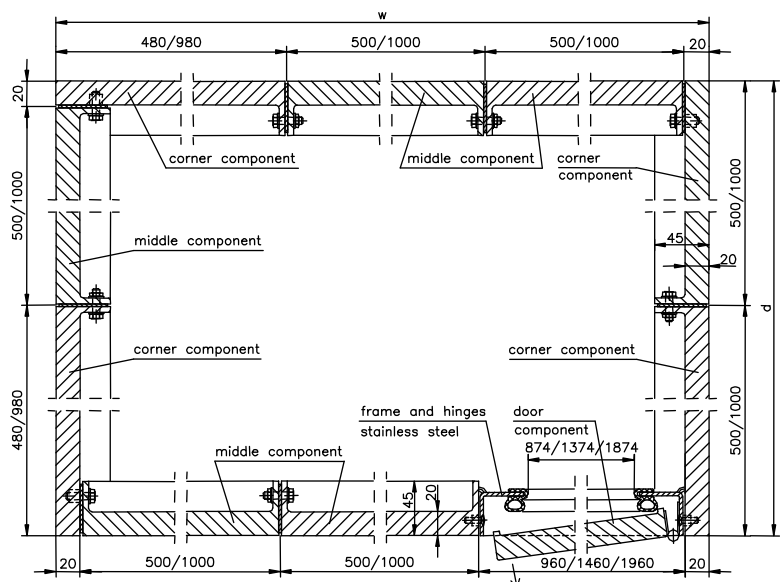
DC 960:  
internal width 874 mm, 1-leaf, IP 65

DC 1460:  
internal width 1374 mm, 2-leaf, IP 54

DC 1960:  
internal width 1874 mm, 2-leaf, IP 54

Door hinges attached to right or left side possible (standard: right side);

Door components can be assembled at variable locations on plan view.



### Vertical Section

Cabinet height h:

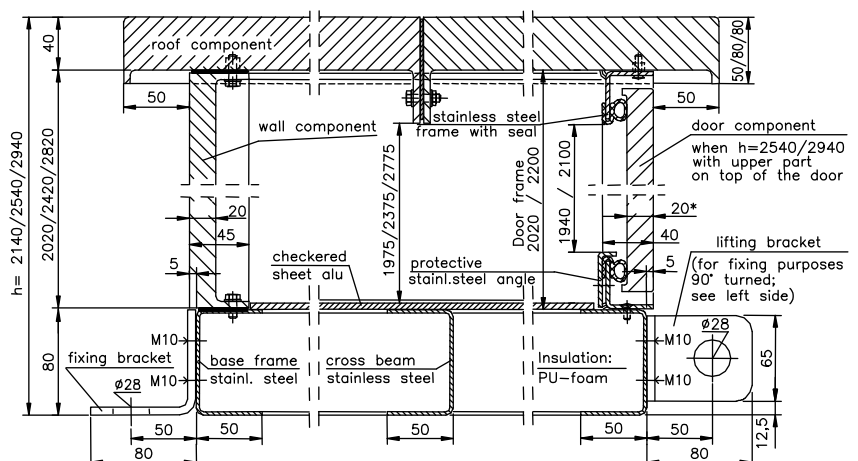
|                              |         |
|------------------------------|---------|
| floor traversable/open ..... | 2140 mm |
| floor traversable/open ..... | 2540 mm |
| floor traversable/open ..... | 2940 mm |

Door components (20 mm):

Internal height = 1940 mm for h = 2140  
Internal height = 2100 mm for h=2540, 2940

When heights  $h$  are 2540mm and 2940 mm an upper part is added to the top of the door component.

\* Door element 40 mm on request,  
Dimensions see page 5.04



## ESK-20

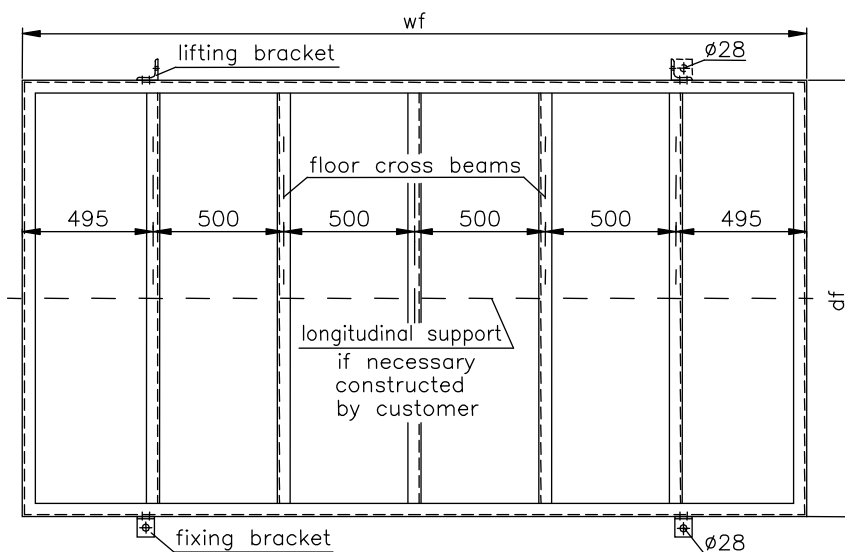
### Floor and Base Frame

Designs: Floor traversable (example 1, 2 and 4)  
Open floor (example 3 and 4)

Material: Base frame and cross beams stainless steel, thickness of material matches statical requirement.  
Traversable floor made of checkered sheet aluminium.

Note: The floor cross beams are statically self-supporting up to 2500 mm. Appropriate longitudinal support (foundation, joist, etc.) must be designed by the customer.  
Foundations or substructure of joists must be constructed by customer to suit statical requirement.

On request: Base frame and cross beams in other dimensions / other material requirements / other floor coverings / other floor constructions.

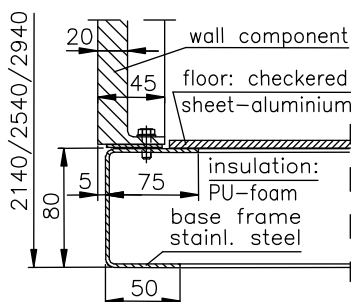


Base Frame Plan View

| cabinet<br>w/d | base frame<br>wf/df |
|----------------|---------------------|
| 1500           | 1490                |
| 2000           | 1990                |
| 2500           | 2490                |
| 3000           | 2990                |
| 3500           | 3490                |
| 4000           | 3990                |
| 4500           | 4490                |
| 5000           | 4990                |
| 5500           | 5490                |
| 6000           | 5990                |

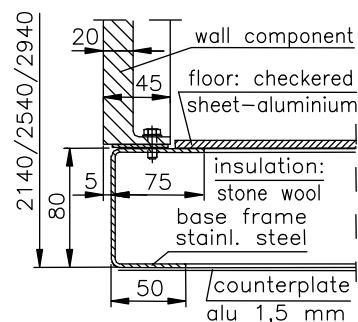
w = width of cabinet  
d = depth of cabinet

When the lifting brackets are turned 90° they can be used as fixing brackets



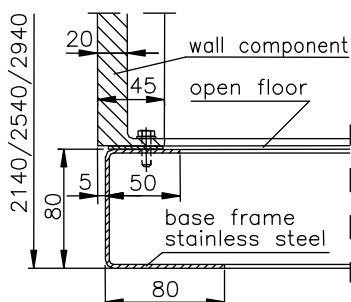
Example 1

Traversable floor, base frame with cross beams



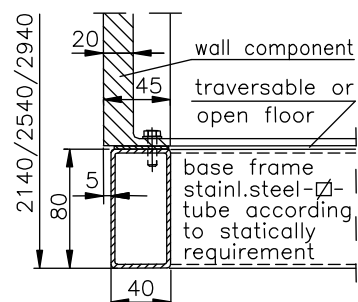
Example 2

Traversable floor, base frame with cross beams and alu-counterplate (extra equipment: stainless steel 1 mm)



Example 3

Open floor, only base frame without cross beams



Example 4

as example 1-3, base frame made of rectangular tubing

## ESK-20

### Wall Components

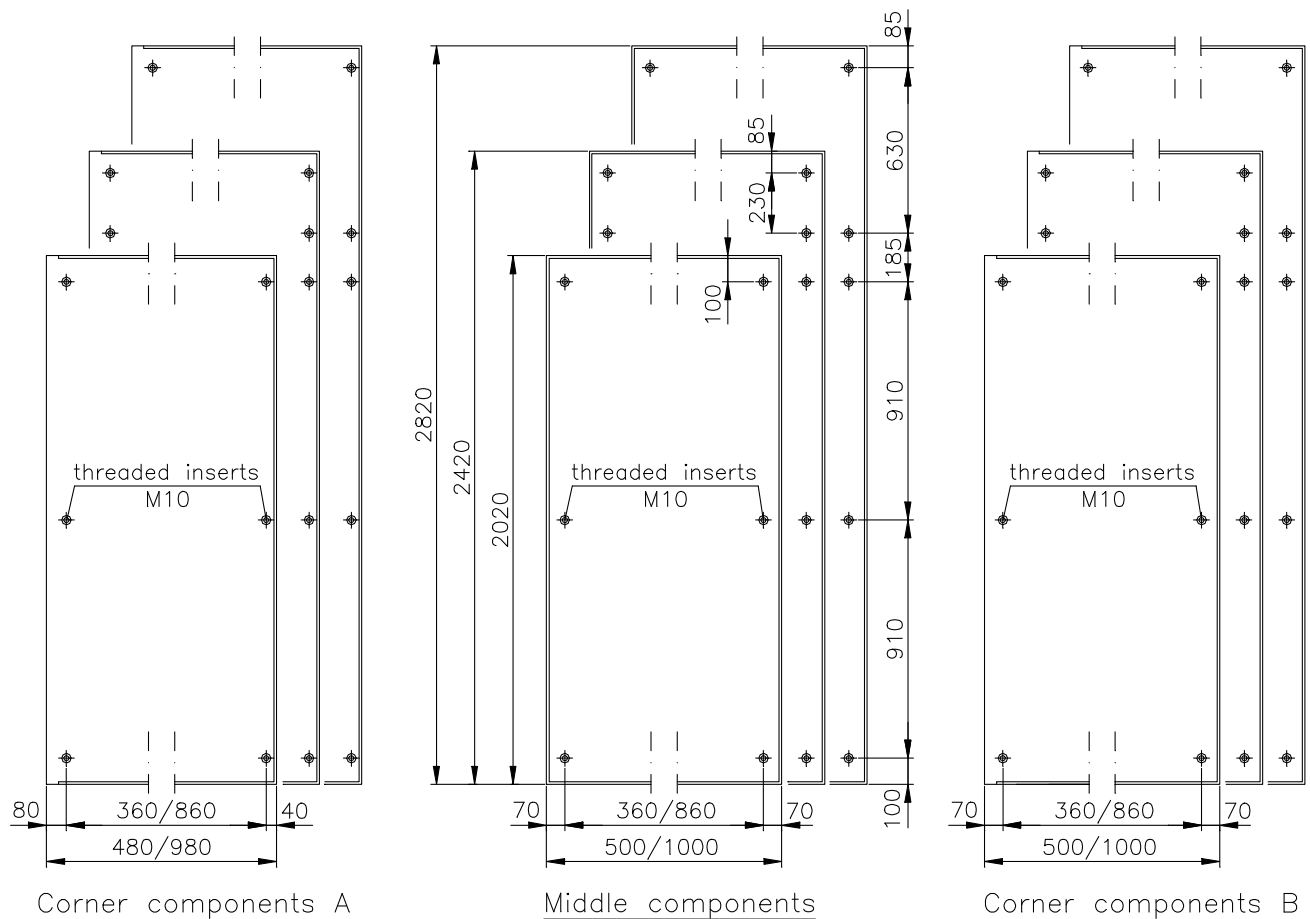
Wall thickness: 20 mm

Standard heights: 2020 mm, 2420 mm and 2820 mm

Standard widths: 500 mm and 1000 mm (middle components and corner components B)  
480 mm and 980 mm (corner components A)

Threaded inserts: M 10, stainless steel, pressed into the inside of the polyester wall components  
(standard arrangement: see drawing)

On request: Special dimensions, special designs, other distances for inserts



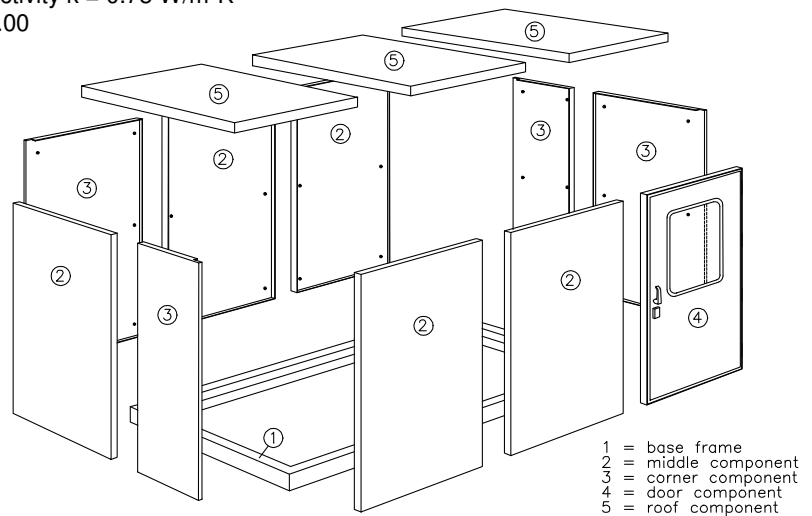
Wall Components  
interior view

# ESK-40

Sandwich component construction, thermal conductivity  $k = 0.75 \text{ W/m}^2\text{K}$   
Other technical data and extra equipment: page 5.00  
and following pages

### Principle of Construction

Floor, walls and roof are assembled with component parts. On this way single components are interchangeable, easy to enlarge and assembly can be done on site.



### Plan View

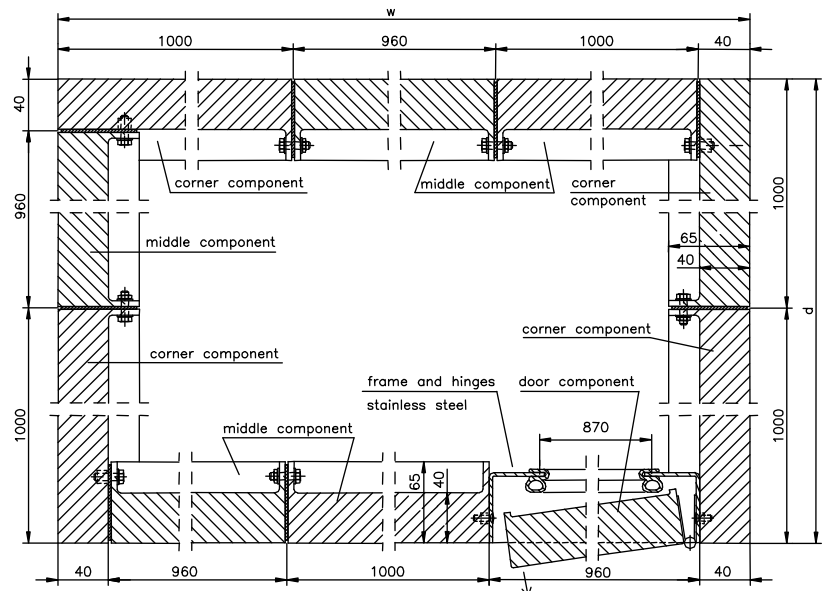
Cabinet width  $w$  and depth  $d$ :  
Standardized measures 1000 mm  
(Depth  $d$  self-supporting up to 4000 mm)

Door components (40 mm):

DC 960:  
Internal width 870 mm, 1-leaf, IP 65

Door hinges attached to right or left side possible (standard: right side);

Door components can be assembled at variable locations on plan view.



### Vertical Section

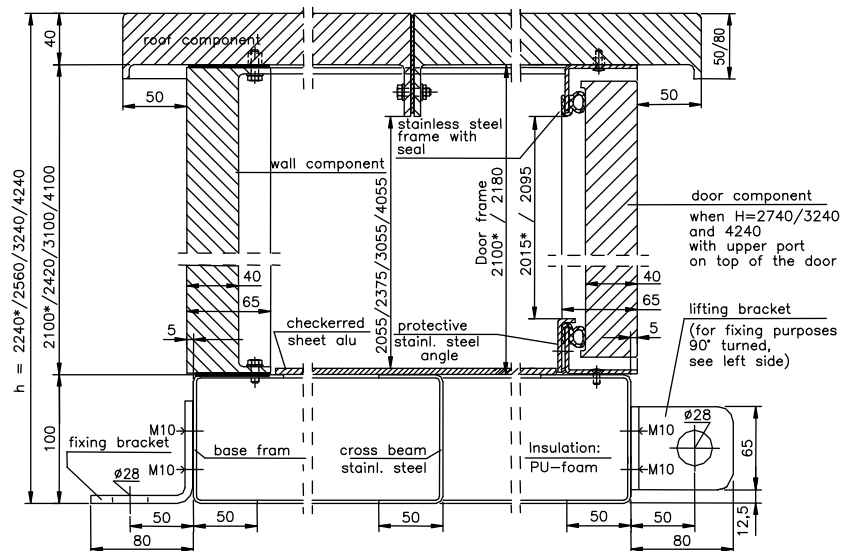
Cabinet height  $h$ :

floor traversable / open .....2240 mm  
 floor traversable / open .....2560 mm  
 floor traversable / open .....3240 mm  
 floor traversable / open .....4240 mm

Door components (40 mm):

Internal height = 2015 mm\* / 2095 mm

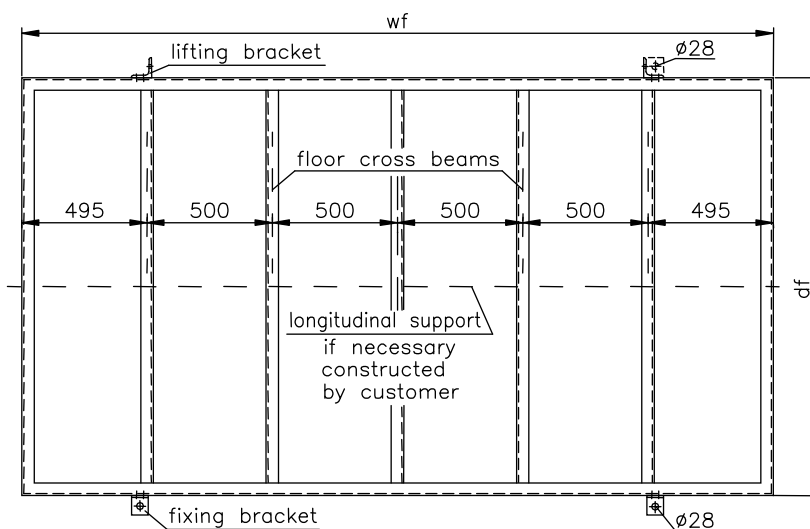
When heights h are 2740mm , 3240 mm and 4240 mm an upper part is added to the top of the door component.



## ESK-40

### Floor and Base Frame

- Designs: Floor traversable (example 1, 2 and 4)  
Open floor (example 3 and 4)
- Material: Base frame and cross beams stainless steel, thickness of material matches statical requirement.  
Traversable floor made of checkered sheet aluminium.
- Note: The floor cross beams are statically self-supporting up to 2500 mm. Appropriate longitudinal support (foundation, joist, etc.) must be designed by the customer.  
Foundations or substructure of joists must be constructed by customer to suit statical requirement.
- On request: Base frame and cross beams in other dimensions / other material requirements / other floor coverings / other floor constructions.

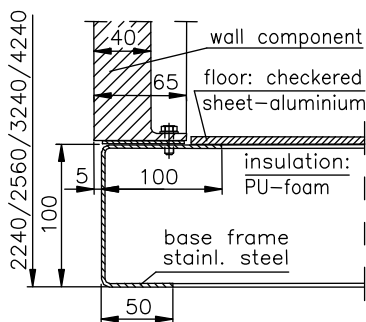


Base Frame Plan View

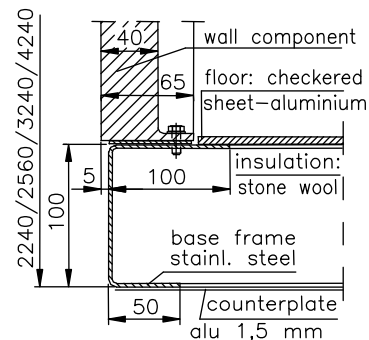
| cabinet<br>w/d | base frame<br>wf/df |
|----------------|---------------------|
| 1500           | 1490                |
| 2000           | 1990                |
| 2500           | 2490                |
| 3000           | 2990                |
| 3500           | 3490                |
| 4000           | 3990                |
| 4500           | 4490                |
| 5000           | 4990                |
| 5500           | 5490                |
| 6000           | 5990                |

w = width of cabinet  
d = depth of cabinet

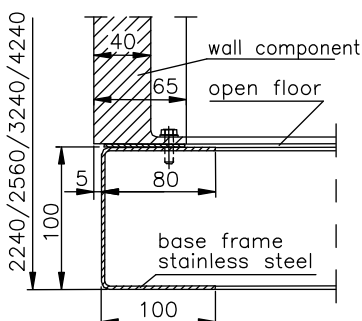
When the lifting brackets are turned 90° they can be used as fixing brackets



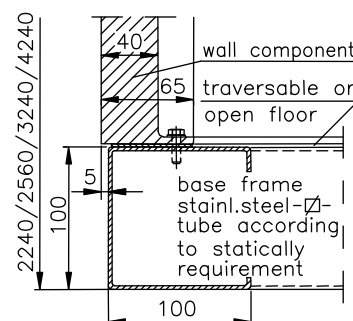
Example 1  
Traversable floor,  
base frame with  
cross beams



Example 2  
Traversable floor,  
base frame with  
cross beams and  
alu-counterplate:  
(extra equipment:  
stainless steel 1 mm)



Example 3  
Open floor,  
only base frame  
without  
cross beams



Example 4  
as example 1-3,  
base frame  
made of  
rectangular tubing

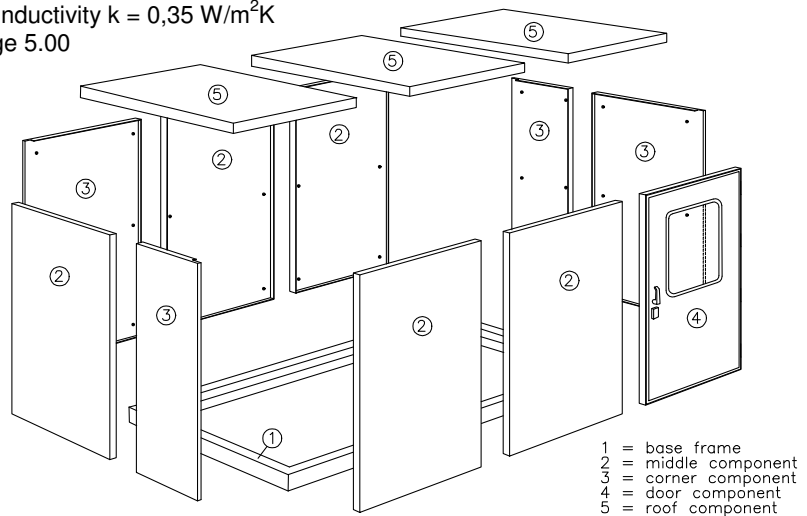
# ESK-80

Sandwich component construction, thermal conductivity  $k = 0,35 \text{ W/m}^2\text{K}$

Other technical data and extra equipment: page 5.00 and following pages

### Principle of Construction

Floor, walls and roof are assembled with component parts. On this way single components are interchangeable, easy to enlarge and assembly can be done on site.



### Plan View

Cabinet width  $w$  and depth  $d$ :

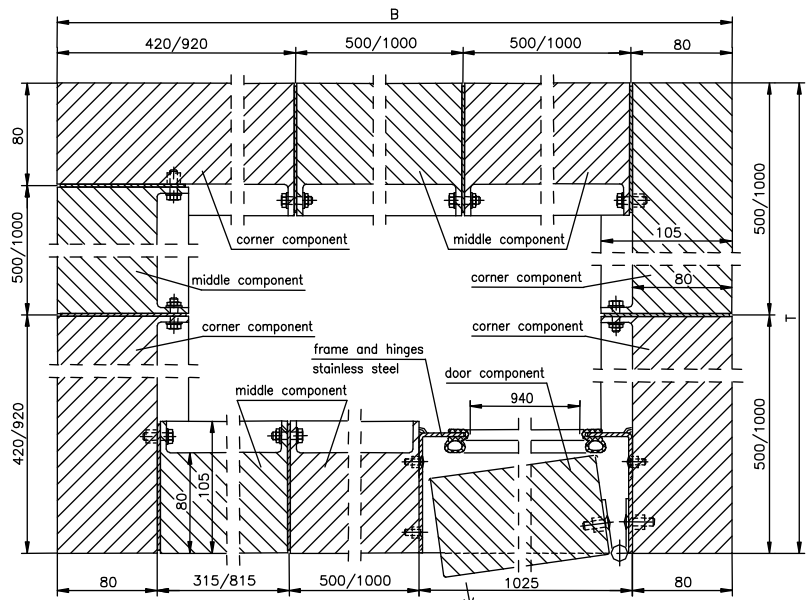
Standardized measures 500 / 1000 mm  
(Depth d self-supporting up to 3000 mm)

Door component:

DC 1025:  
internal width 940 mm, 1-leaf, IP 65

Door hinges attached to right or left side possible (standard: right side);

Door components can be assembled at variable locations on plan view.



### ***Vertical Section***

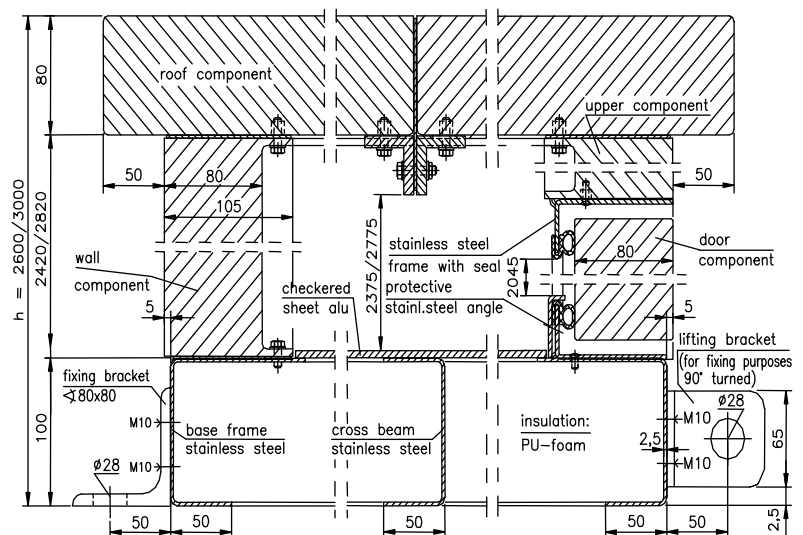
Cabinet height  $h$ :

floor traversable/open.... 2600 mm  
floor traversable/open.... 3000 mm

Door components:

Internal height = 2045 mm

An upper part can be added to the top of the door component ( $h = 3000 \text{ mm}$ )



## ESK-80

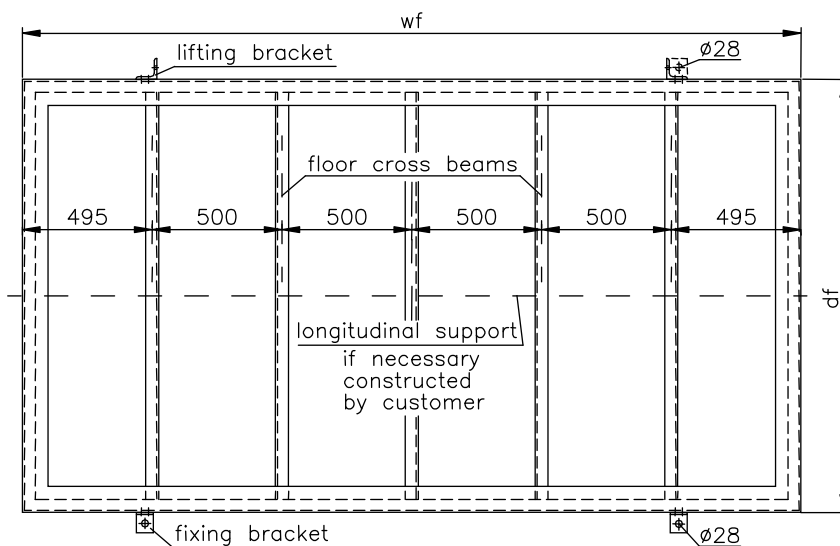
### Floor and Base Frame

Designs: Floor traversable (examples 1, 2 and 4)  
Open floor (examples 3 and 4)

Material: Base frame and cross beams stainless steel, thickness of material matches statical requirement.  
Traversable floor made of checkered sheet aluminium.

Note: The floor cross beams are statically self-supporting up to 2500 mm. Appropriate longitudinal support (foundation, joist, etc.) must be designed by the customer.  
Foundations or substructure of joists must be constructed by customer to suit statical requirement.

On request: Base frame and cross beams in other dimensions / other material requirements / other floor coverings / other floor constructions.

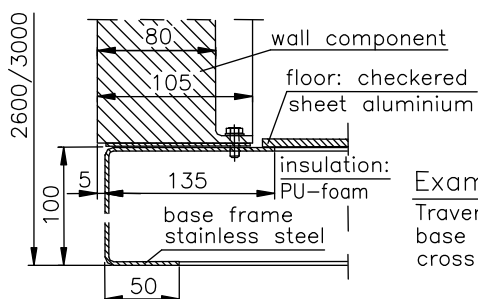


Base Frame Plan View

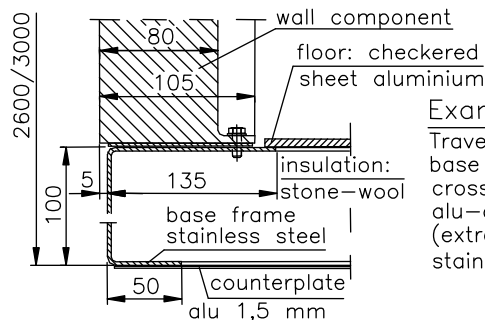
| cabinet<br>w/d | base frame<br>wf/df |
|----------------|---------------------|
| 1500           | 1490                |
| 2000           | 1990                |
| 2500           | 2490                |
| 3000           | 2990                |
| 3500           | 3490                |
| 4000           | 3990                |
| 4500           | 4490                |
| 5000           | 4990                |
| 5500           | 5490                |
| 6000           | 5990                |

w = width of cabinet  
d = depth of cabinet

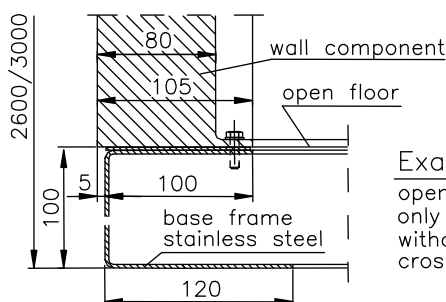
When the lifting brackets are turned 90° they can be used as fixing brackets



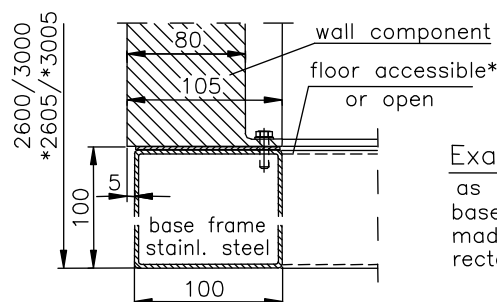
Example 1  
Traversable floor,  
base frame with  
cross beams



Example 2  
Traversable floor,  
base frame with  
cross beams and  
alu-counterplate  
(extra equipment:  
stainless steel 1 mm)



Example 3  
open floor,  
only base frame  
without  
cross beams



Example 4  
as example 1–3,  
base frame  
made of  
rectangular tubing



## ESK-80

### Wall Components

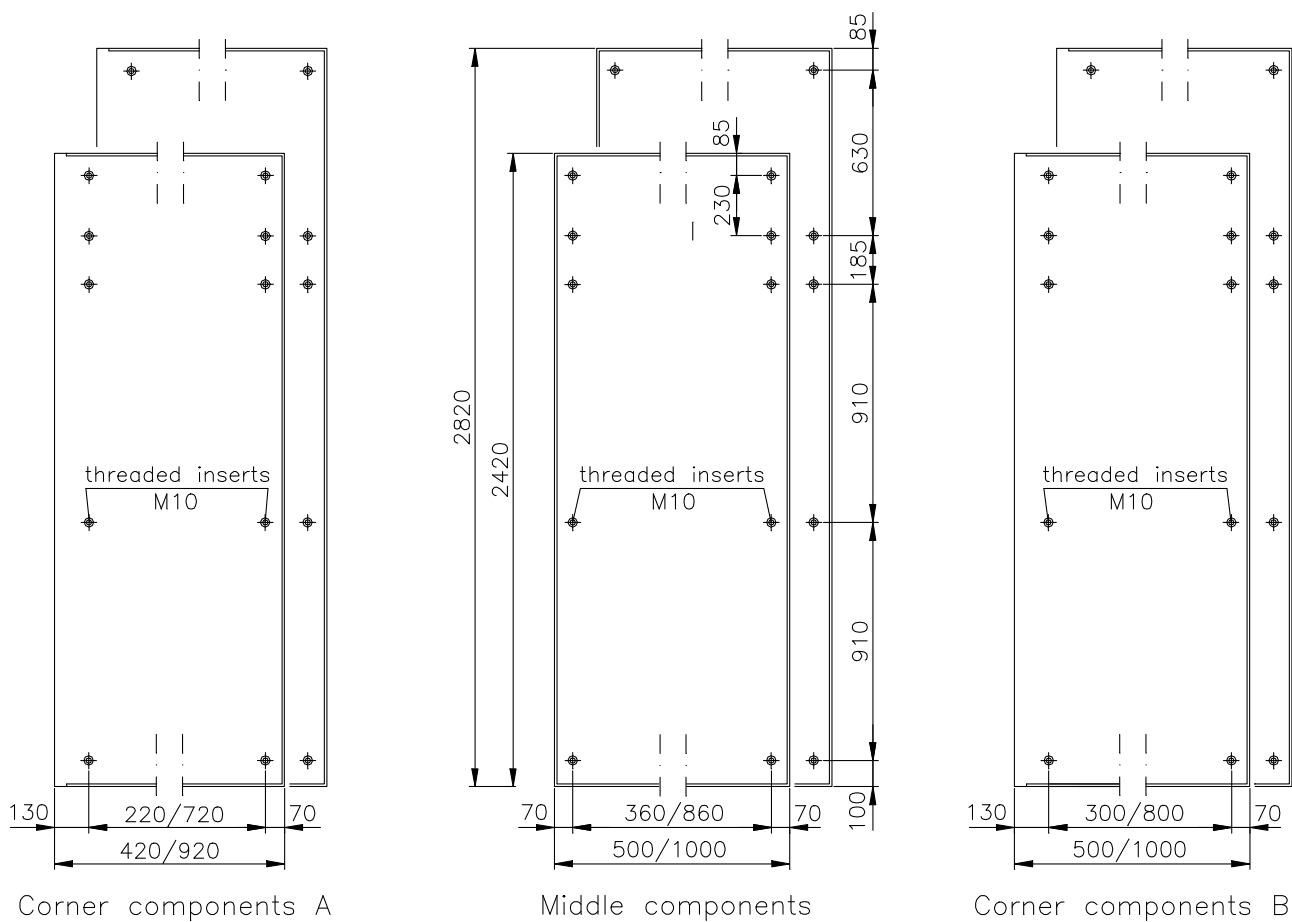
Wall thickness: 80 mm

Standard heights: 2420 mm and 2820 mm

Standard widths: 500 mm and 1000 mm (middle components and corner components B)  
420 mm and 920 mm (corner components A)

Threaded inserts: M 10, stainless steel, pressed into the inside of the polyester wall components (standard arrangement: see drawing)

On request: Special dimensions, special designs, other distances for inserts



Wall Components  
interior view

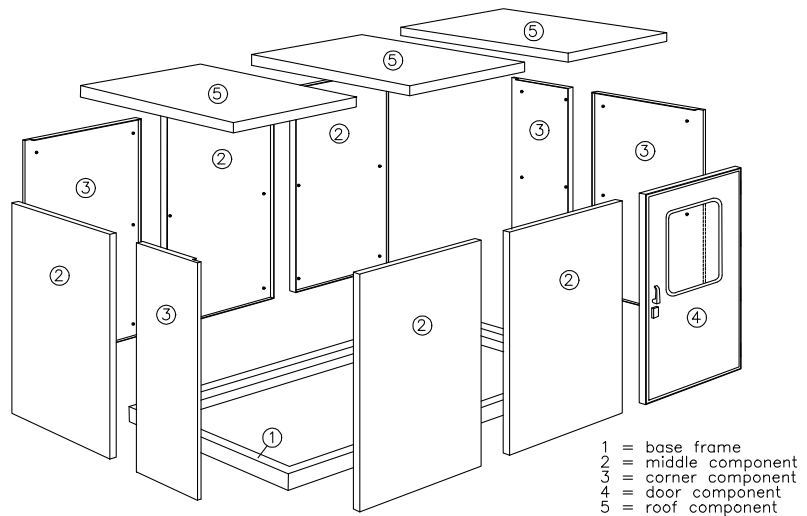
## ESB

Sandwich component construction, thermal conductivity  $k = 1.20 \text{ W/m}^2\text{K}$   
Other technical data and extra equipment on request

### Principle of Construction

Floor, walls and roof are assembled with component parts. On this way single components are interchangeable, easy to enlarge and assembly can be done on site.

Aluminium and stainless steel do not require surface treatment.



### Construction

Material:

Sheet aluminium (outside 2 mm, inside 1,5 mm),

Stainless steel (outside 1,5 mm, inside 1 mm),

Insulation of mineral wool

Cabinet size:

Width  $w$  and depth  $d$ :  
standardized measures 500 / 1000 mm

Height  $h$  2200 mm, 2510 mm, 3010 mm

Door components:

DC 1000: internal width 950 / 870 mm,  
1-leaf, IP 65

DC 1500: internal width 1450/1370 mm,  
2-leaf, IP 54

DC 2000: internal width 1950/1870 mm,  
2-leaf, IP 54

Internal height: 2095 mm (1950 mm with  $h = 2200 \text{ mm}^*$ ). An upper plate compensates space above door component.

Door hinges attached to right or left side possible (standard: right side);

Door components can be assembled at variable locations on plan view.

On request:

Special dimensions, special designs

