

# **LIEBHERR**

**Detailed design guide for EC(B)N model  
Storage centres for integrated use**

Version 11 / 2022

**Liebherr's engineering excellence in Germany provides the largest selection of refrigerators, freezers and wine cabinets worldwide.**

Liebherr is one of the world's leading manufacturers of premium refrigerators and freezers. For more than 60 years, Liebherr has specialised in developing and manufacturing first-class refrigerators and freezers as well as wine cabinets. We focus on performance and efficiency as well as keeping food fresher for longer. Produced in Austria and Germany, Liebherr has a full line of premium models tailored to different markets to fit any design vision you have for your kitchen.

Our free-standing stainless steel models are elegant centrepieces that make a definite statement in any kitchen. Our built-in models are perfect for insertion into rows of kitchen units. And our models for integrated use become one with your kitchen design, hidden seamlessly behind your cabinetry.

High-quality materials, perfectly detailed finishes, precise electronic control systems, advanced cooling components, variable-speed compressors and the latest production processes ensure energy efficiency and cooling capacity for years to come. Our superior products offer premium quality, cutting-edge design and innovative features that fit with your busy lifestyle.

**Liebherr's commitment to the environment**

The components of Liebherr products can be recycled if the necessary resources are available. A concern for the environment and a desire to protect natural resources has led to increased levels of recycling year after year. When Liebherr manufactures products, it is essential that the recyclable recovery rate of the materials we use constantly increases.

Recycling is a common goal among all manufacturers, municipalities and recycling companies to protect our environment. Protecting the environment and producing products which have a low impact on the environment is one of Liebherr's core values. When the service life has ended, please dispose of your old appliances in an environmentally safe and friendly manner.

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## Safety instructions

### PLEASE READ AND FOLLOW THESE INSTRUCTIONS

This detailed design guide contains warnings and important notes.

These instructions contain information for planning and for efficient, safe installation.

Always read and follow all warnings and important notes.



**WARNING!**

**Warning indicates a potentially hazardous situation which could result in death or serious injury if the warning is not observed.**

#### IMPORTANT

**An important note highlights information that is especially relevant to a problem-free installation and operation.**

## Electrical requirements and safety

Only operate the appliance with alternating current (AC).

The maximum voltage and frequency depend on the appliance design for the country concerned.

Sockets must be properly earthed and protected by a fuse.

Sockets must not be situated behind the appliance and must be easily accessible to disconnect the appliance from the mains if necessary.

A separate circuit for the appliance is recommended to prevent food defrosting or spoiling due to a power failure caused by other appliances.



**WARNING!**

**Risk of fatal electric shock.**

**Do not connect the appliance to unearthed sockets.**

**A failure to obey this instruction may result in serious injury or death.**



**WARNING!**

**Danger of fire**

- **Do not connect the appliance using an extension cable or extension socket. There is a danger of overheating and fire as a result of possible poor socket contacts.**
- **Do not connect the appliance using an inverter. There is a danger of overheating – resulting in fire – of the electronic control system as a result of incorrect sinusoidal voltage from various inverters.**

**A failure to obey these instructions may result in fire, serious injury or death.**

# General notes

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## IceMaker

The IceMaker is fitted in the freezer compartment of the combined refrigerator-freezer. It must be connected to the mains water supply to work.

The appliance must be levelled to ensure that all the chambers in the ice-cube tray of the IceMaker are completely filled with water.

See the section entitled **Water connection for IceMaker** for further details.

## Requirements for installation

Check the following:

- Is the floor designed to withstand the net weight of the appliance plus the weight of complete contents?

The net weight of the appliances is as follows:

ECBN 5066 > 147 kg  
EC(B)N 6156 > 163 kg  
EC(B)N 6256 > 159 kg

- Is the floor level?

### IMPORTANT

**Do not start the appliance for 1 hour after transport so that the lubricant in the compressor can collect in the compressor housing and cannot get into the refrigerant circuit.**

## Anti-tipping device

The anti-tipping bracket supplied with the appliance must always be installed to prevent the appliance tipping over when the fully loaded door is opened.

## Range of appliance use

The appliance is suitable solely for storing food in a domestic environment or similar.

This includes, for example, use:

- in private homes,
- in staff kitchenettes, bed and breakfast establishments,
- by guests in cottages, hotels, motels and other forms of accommodation,
- in catering and similar services in the wholesale trade.

The appliance is not suitable for storing and cooling medicines, blood plasma or laboratory preparations.

Incorrect use of the appliance can cause the stored goods to be damaged or spoiled.

Furthermore, the appliance is not suitable for use in explosion-hazard areas.

## Climate rating

The climate rating indicates the room temperature at which the appliance may be operated in order to achieve full cooling capacity.

The climate rating for the appliance is shown on the type plate.

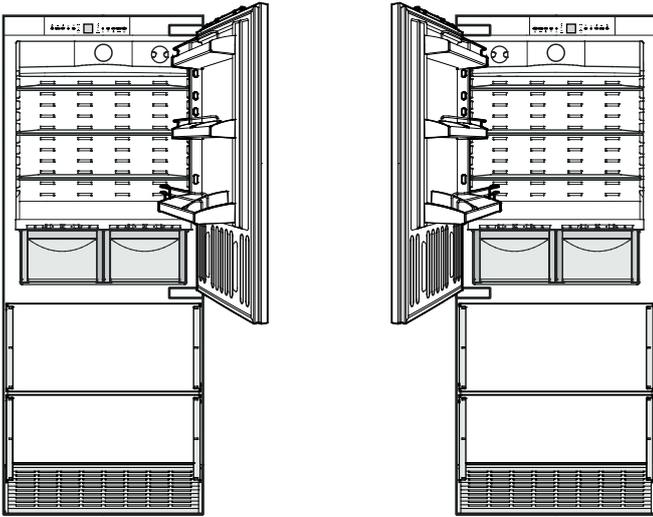
| Climate rating | Ambient temperature |
|----------------|---------------------|
| SN             | +10°C to +32°C      |
| N              | +16°C to +32°C      |
| ST             | +16°C to +38°C      |
| T              | +16°C to +43°C      |
| SN-ST          | +10°C to +38°C      |
| SN-T           | +10°C to +43°C      |

### IMPORTANT

**Do not operate the appliance outside the specified ambient temperature range.**

The appliance's refrigerant circuit has been tested for leaks.

## General description

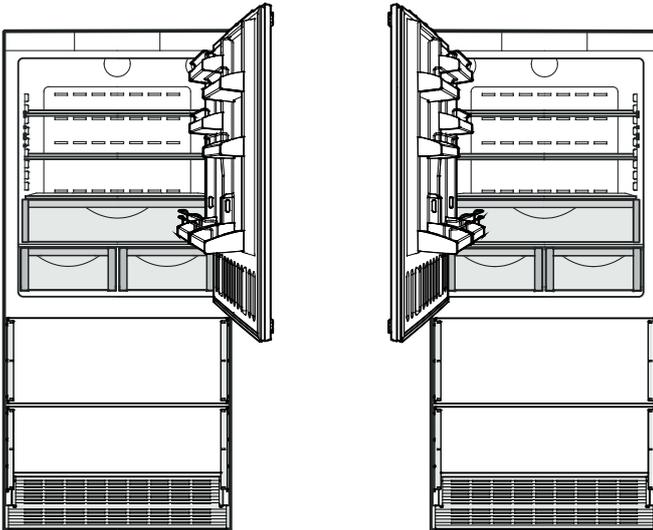


### ECBN 5066

The appliance is available with the door hinged on the right or left.

The door hinges can be reversed on both versions.

The door hinge conversion kit is required for this purpose (see section entitled **Accessories**).

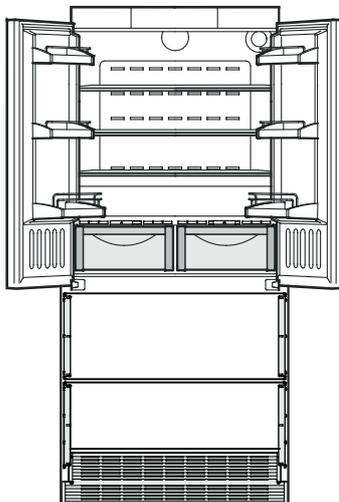


### EC(B)N 6156

The appliance is available with the door hinged on the right or left.

The door hinges can be reversed on both versions.

The door hinge conversion kit is required for this purpose (see section entitled **Accessories**).



### EC(B)N 6256

## Water connection for IceMaker

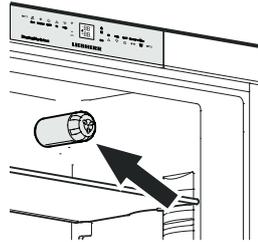
A water supply line with a water shut-off valve and an R 3/4 connector is required for the IceMaker.

### IMPORTANT

**The water shut-off valve must not be situated behind the appliance and must be easily accessible to disconnect the appliance from the water supply if necessary.**

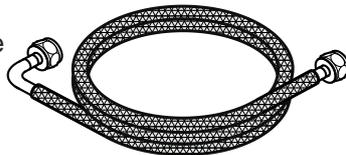
The water pressure must be between 1.5 and 6 bar.

If the water filter is inserted in the appliance, the water pressure must be between 2.8 and 6 bar. →



If the water pressure with the inserted water filter is too low, this may cause the IceMaker to malfunction.

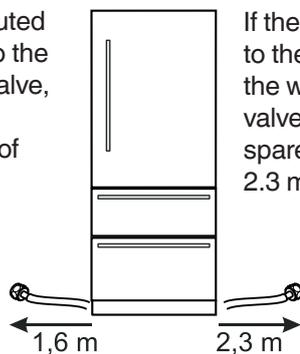
Only use the supply hose provided with the appliance to connect the IceMaker to the water supply.



The supply hose is connected to the bottom right of the appliance plinth at the front and routed to the rear.

If the hose is routed to the rear left to the water shut-off valve, there is a spare length of 1.6 m of hose.

If the hose is routed to the rear right to the water shut-off valve, there is a spare length of 2.3 m of hose.



## Safety instructions

- The connection to the mains water supply may only be made by trained personnel.
- The water quality must comply with the drinking water directives of the country in which the appliance is used.
- The IceMaker is designed exclusively to make ice cubes in quantities required by a household and may only be operated with drinking water.
- The manufacturer cannot accept liability for damage caused by a faulty connection to the mains water supply.

## Methods of installation

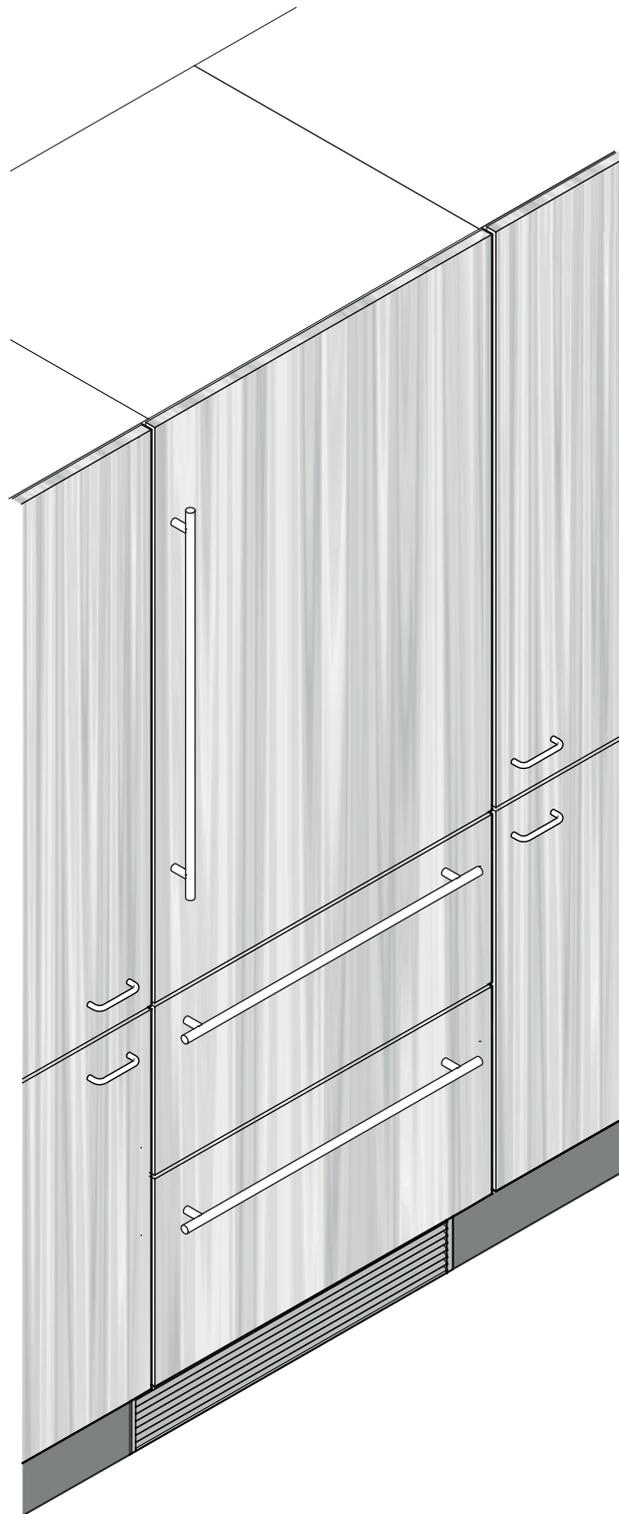
### Internal door panel

The door panel fits inside the body of the kitchen unit; the front of the unit is visible.



### External door panel

The door panel rests on the panels of the kitchen unit; the front of the unit is covered by the door panel.



## Appliance venting

No ventilation openings are required in the kitchen unit for the EC(B)N appliance series.  
The air is exchanged through the appliance plinth.



## Refrigerant R600a

The refrigerant R600a used in the appliances is environmentally friendly but flammable.

### **WARNING**

**Danger of fire through overheating as a result of inadequate ventilation.**

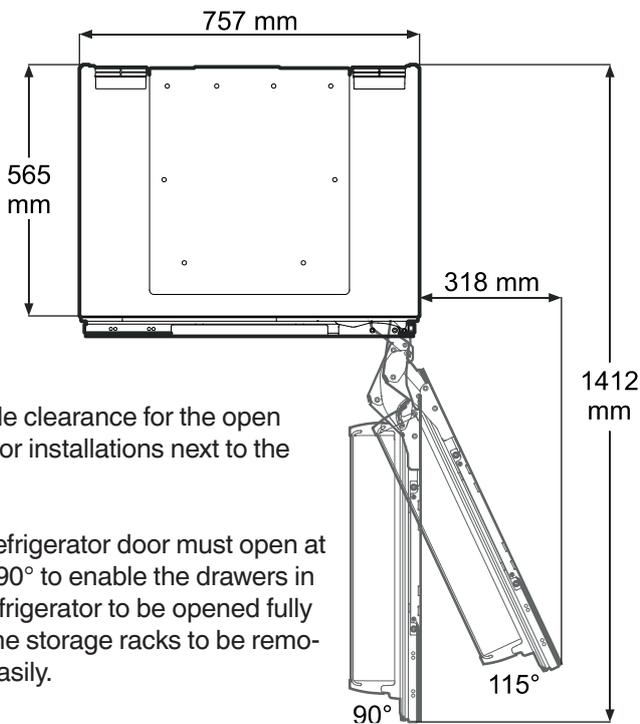
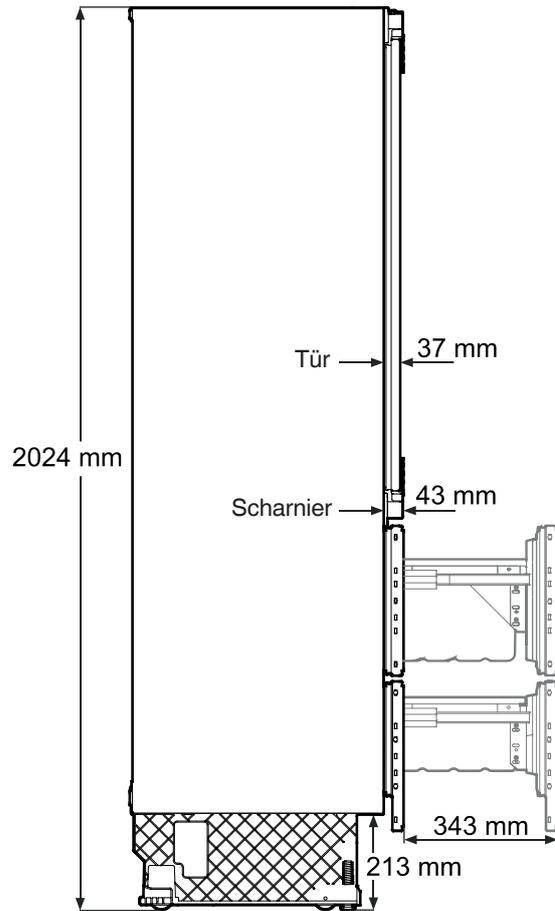
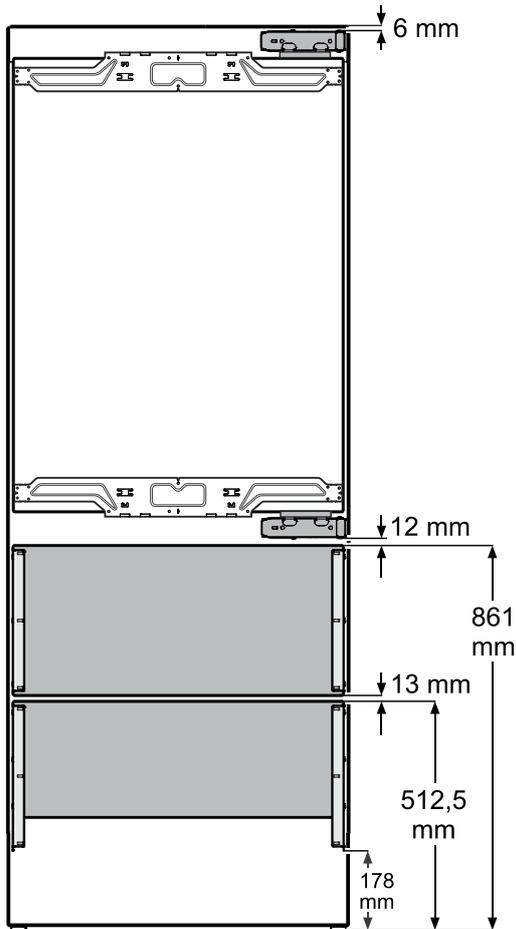
**Do not cover the ventilation openings.**

**Only use the ventilation grille supplied for the appliance plinth.**

# Storage centres for integrated use

ECBN 5066

Appliance dimensions (height dimensions are with adjustable feet or castors fully screwed in)

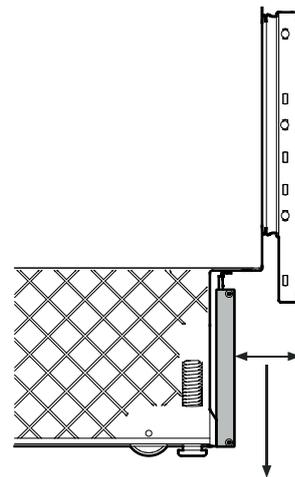


Include clearance for the open door for installations next to the wall.

The refrigerator door must open at least 90° to enable the drawers in the refrigerator to be opened fully and the storage racks to be removed easily.

90° 115°

Maximum door opening angle = 115°



The supplied ventilation grille can be adjusted in depth after installation.

Adjustment range 41 mm - 76 mm

The procedure is described in the installation instructions

# Storage centres for integrated use

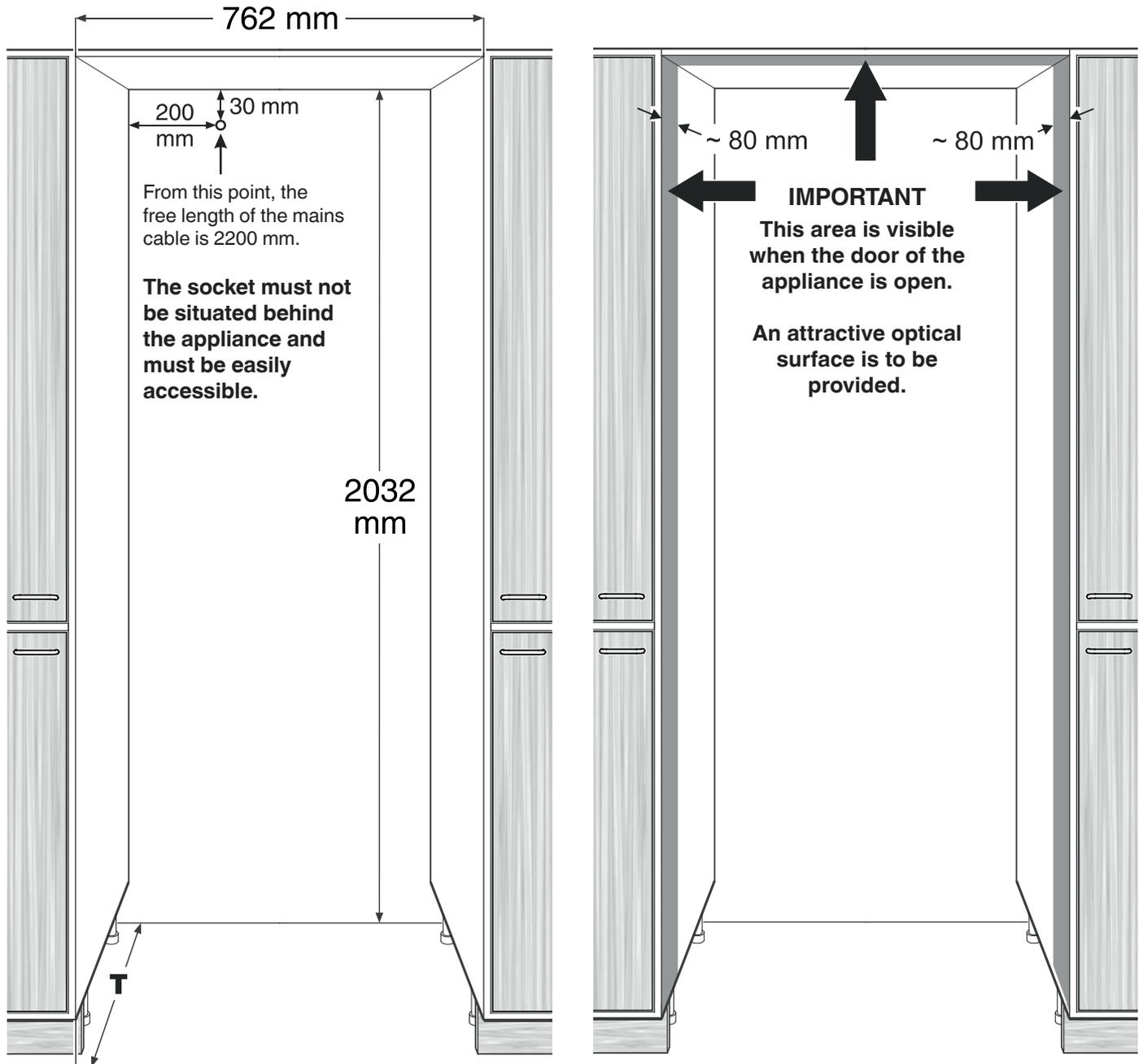
## ECBN 5066

### Recess dimensions

The appliance stands on the floor between two kitchen units.

If the appliance is integrated into a kitchen unit, the panel width must be adjusted accordingly.

The dimensions quoted in the section entitled "Panel dimensions" are without a separate kitchen unit.



Recess depth **T** for installations with external door panel = 610 mm

Recess depth **T** for installations with internal door panel = 610 mm + **panel thickness**

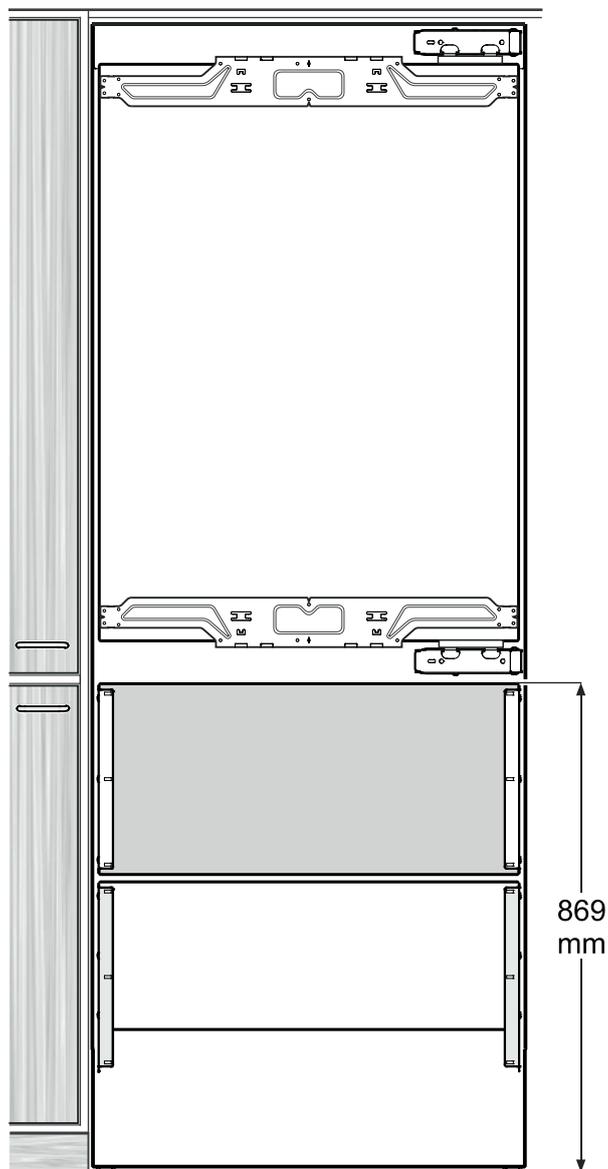
### Note

20 mm thick stainless steel panels for internal installation are available as accessories. If these panels are used, a recess depth of 630 mm is required.

## Storage centres for integrated use

ECBN 5066

Height adjustment in the recess



Adjust the appliance in the recess to a **reference height of 869 mm**, measured from the floor to the top of the upper freezer drawer.

### **IMPORTANT**

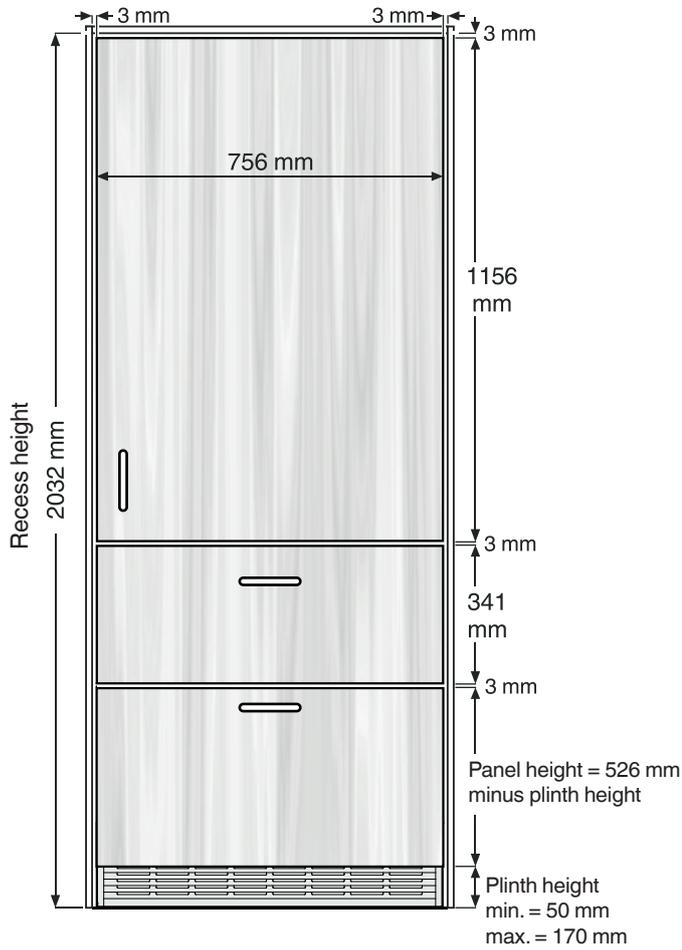
**This height adjustment is very important. It provides the basis for the correct positioning of the front panels.**

# Storage centres for integrated use

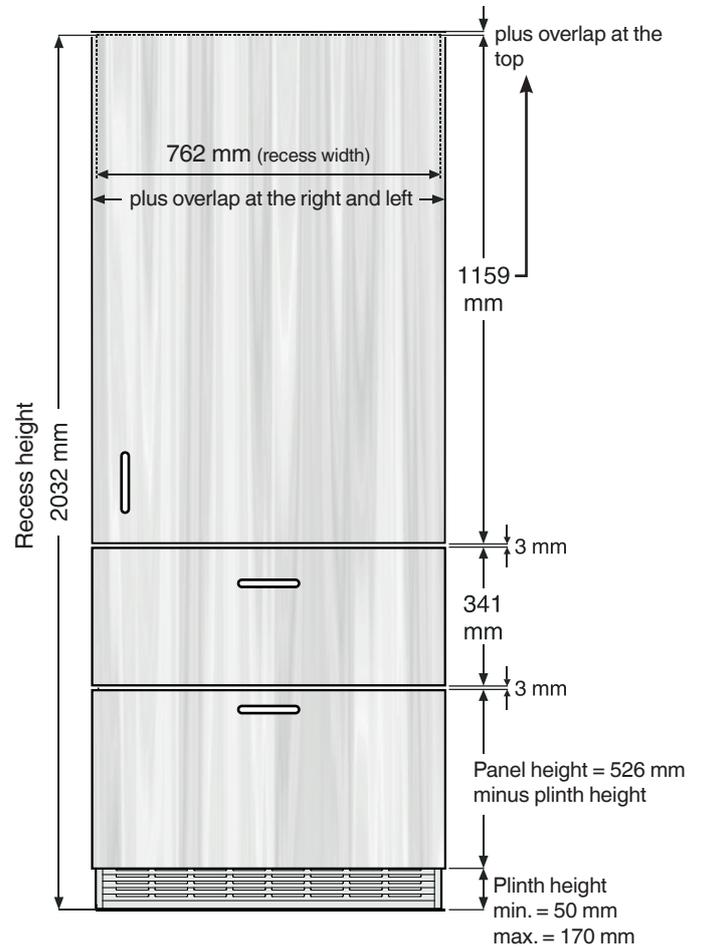
## ECBN 5066

### Panel dimensions

#### Internal door panel



#### External door panel



Minimum panel thickness = 16 mm  
Maximum panel thickness = 19 mm

Maximum admissible weight of the refrigerator panel = 27 kg  
Maximum admissible weight of a single freezer panel = 12 kg

### IMPORTANT

It is vital that you refer to the collision grids on pages 14 and 15.

# Storage centres for integrated use

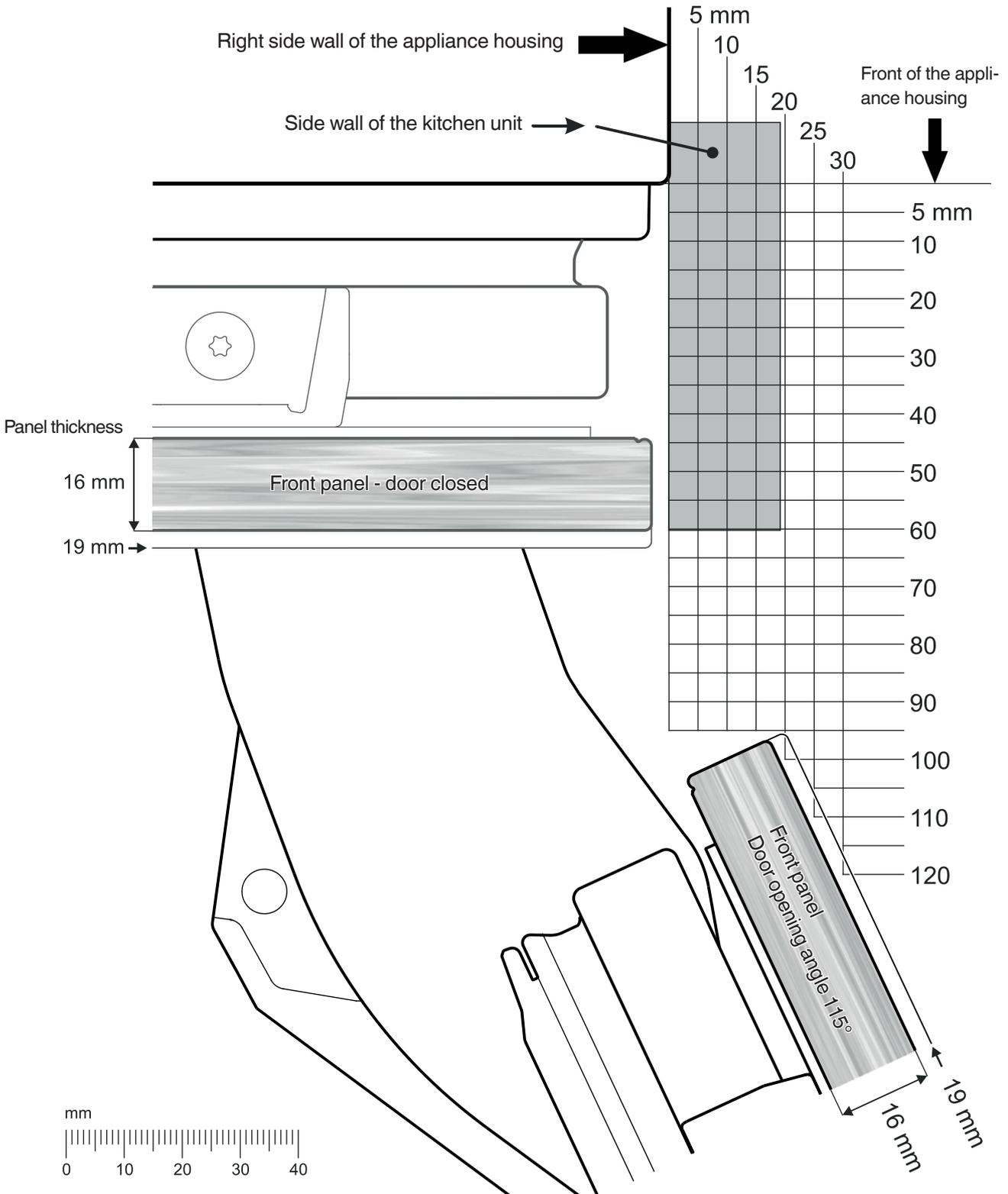
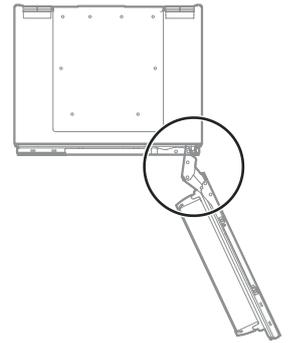
ECBN 5066

## Door panel collision grid - internal door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

View from above



# Storage centres for integrated use

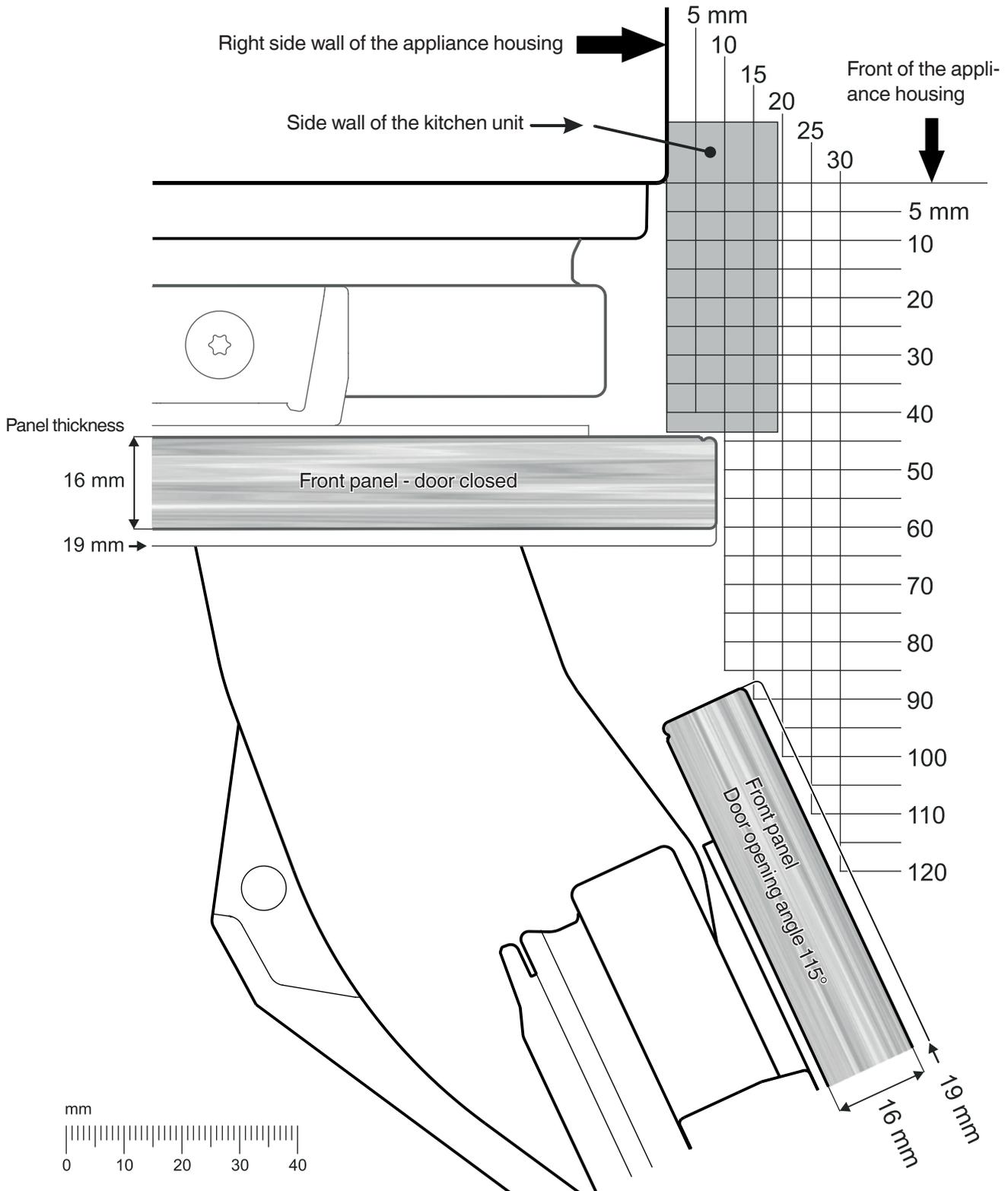
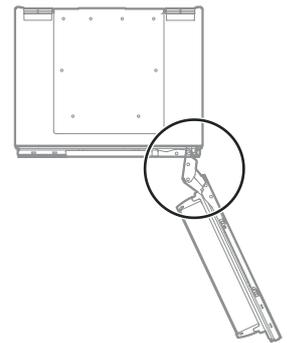
ECBN 5066

## Door panel collision grid - external door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

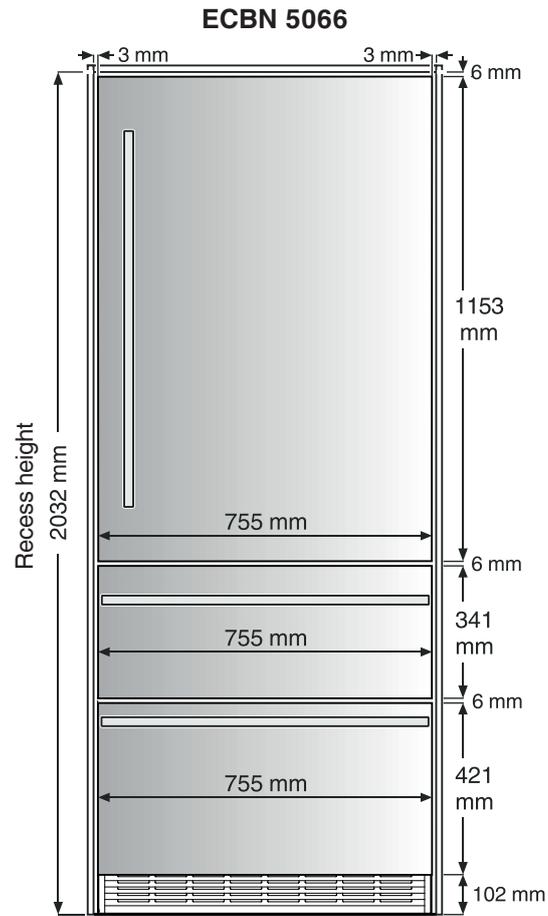
View from above



# Storage centres for integrated use

## ECBN 5066

### Panel dimensions for accessory stainless steel panels and gap dimensions

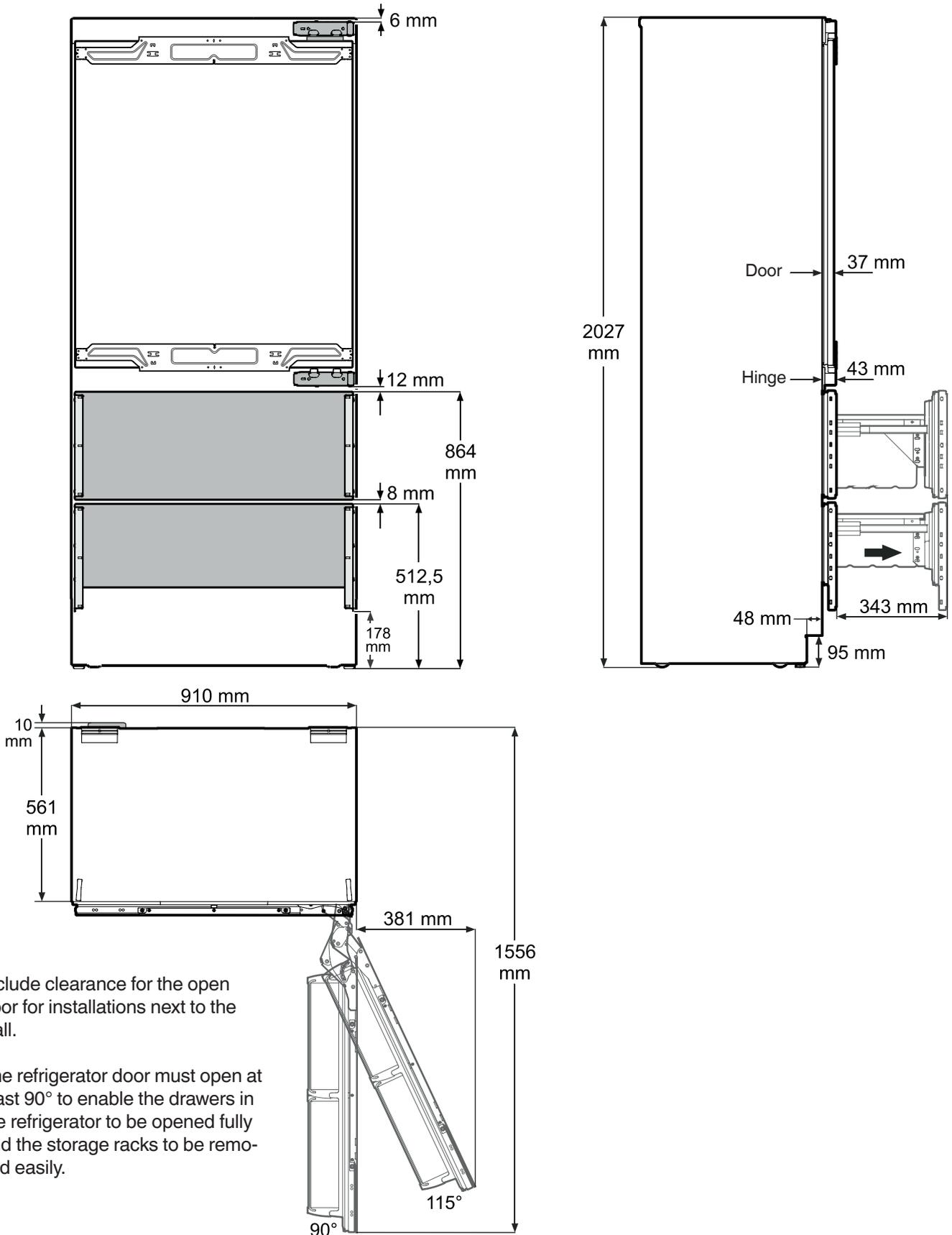




# Storage centres for integrated use

## EC(B)N 6156

Appliance dimensions (height dimensions are with adjustable feet or castors fully screwed in)



Include clearance for the open door for installations next to the wall.

The refrigerator door must open at least 90° to enable the drawers in the refrigerator to be opened fully and the storage racks to be removed easily.

Maximum door opening angle = 115°

# Storage centres for integrated use

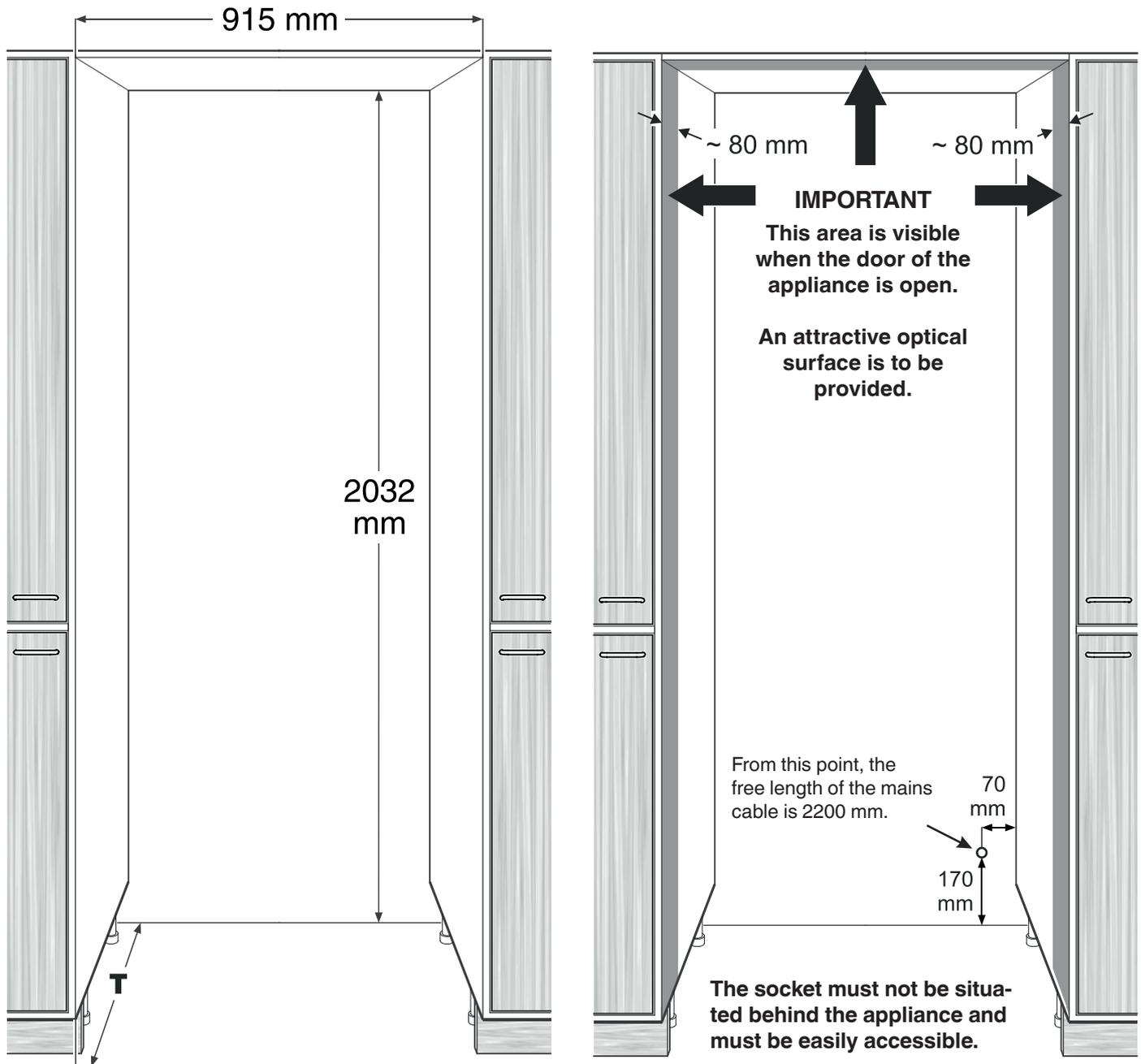
## EC(B)N 6156

### Recess dimensions

The appliance stands on the floor between two kitchen units.

If the appliance is integrated into a kitchen unit, the panel width must be adjusted accordingly.

The dimensions quoted in the section entitled "Panel dimensions" are without a separate kitchen unit.



Recess depth **T** for installations with external door panel = 610 mm

Recess depth **T** for installations with internal door panel = 610 mm + **panel thickness**

### Note

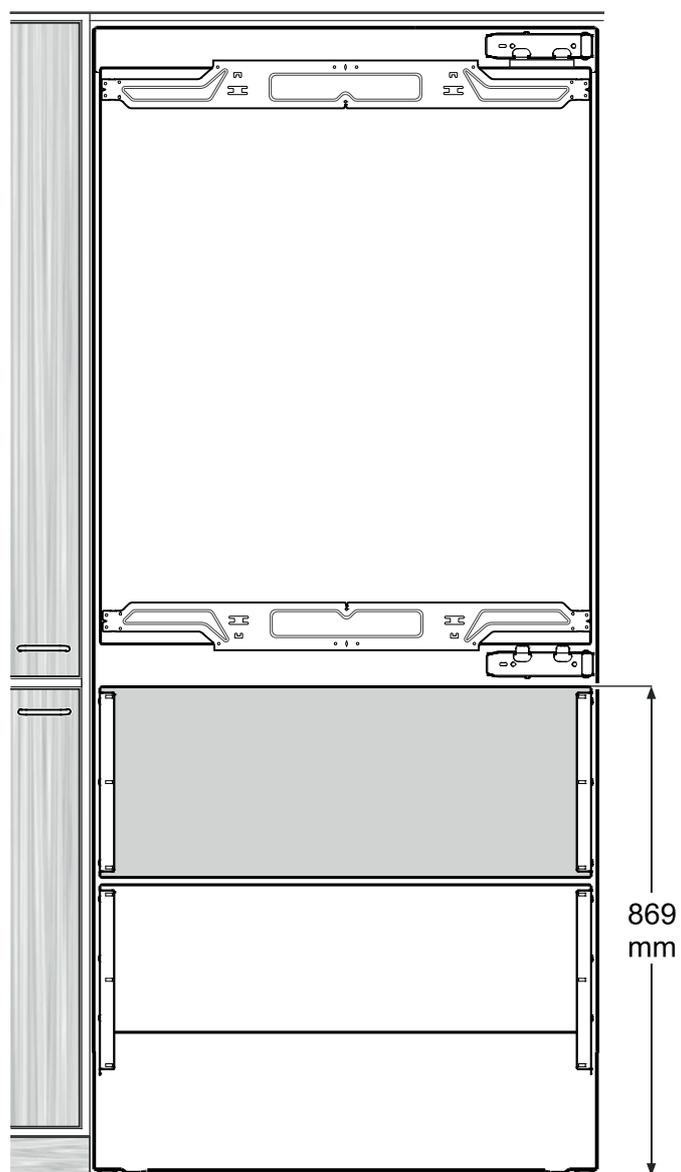
20 mm thick stainless steel panels for internal installation are available as accessories. If these panels are used, a recess depth of 630 mm is required.

## Storage centres for integrated use

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EC(B)N 6156

Height adjustment in the recess



Adjust the appliance in the recess to a **reference height of 869 mm**, measured from the floor to the top of the upper freezer drawer.

### IMPORTANT

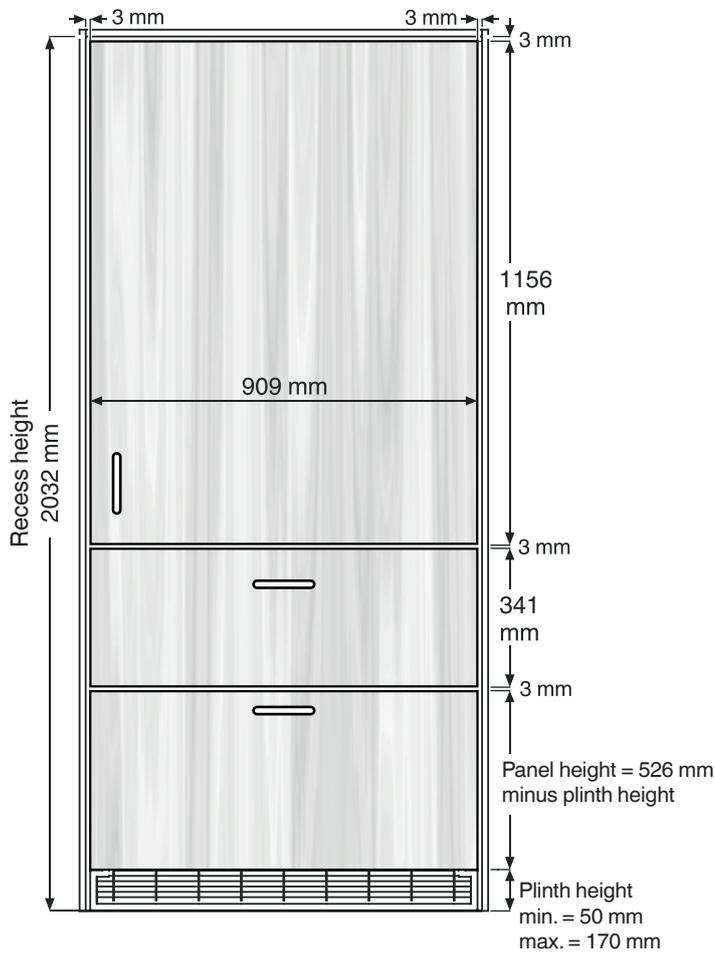
**This height adjustment is very important. It provides the basis for the correct positioning of the front panels.**

# Storage centres for integrated use

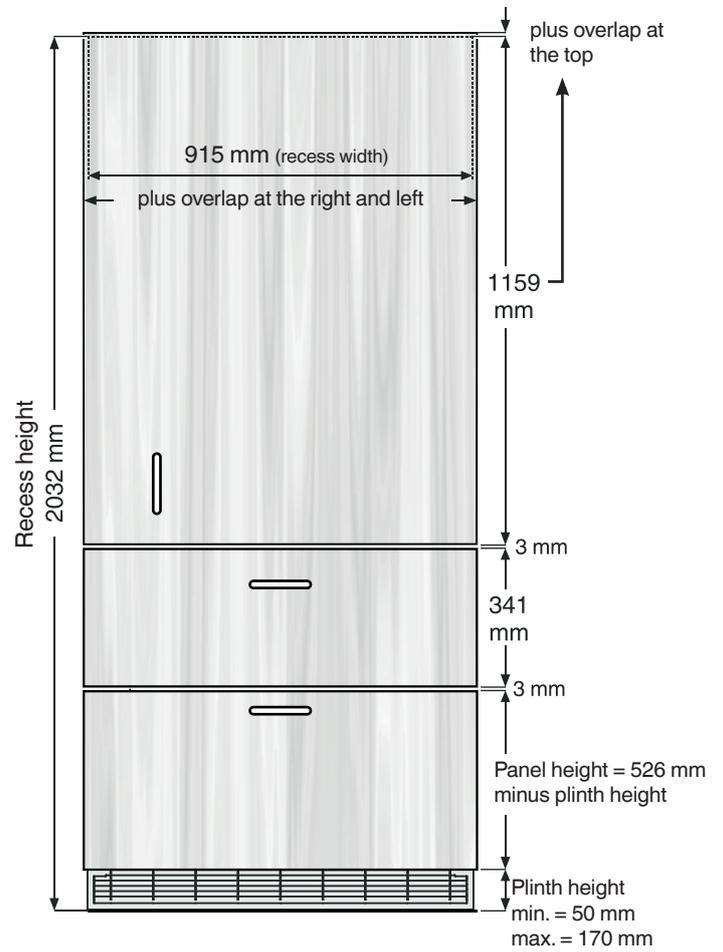
EC(B)N 6156

## Panel dimensions

Internal door panel



External door panel



Minimum panel thickness = 16 mm  
Maximum panel thickness = 19 mm

Maximum admissible weight of the refrigerator panel = 27 kg  
Maximum admissible weight of a single freezer panel = 12 kg

### IMPORTANT

It is vital that you refer to the collision grids on pages 22 and 23.

# Storage centres for integrated use

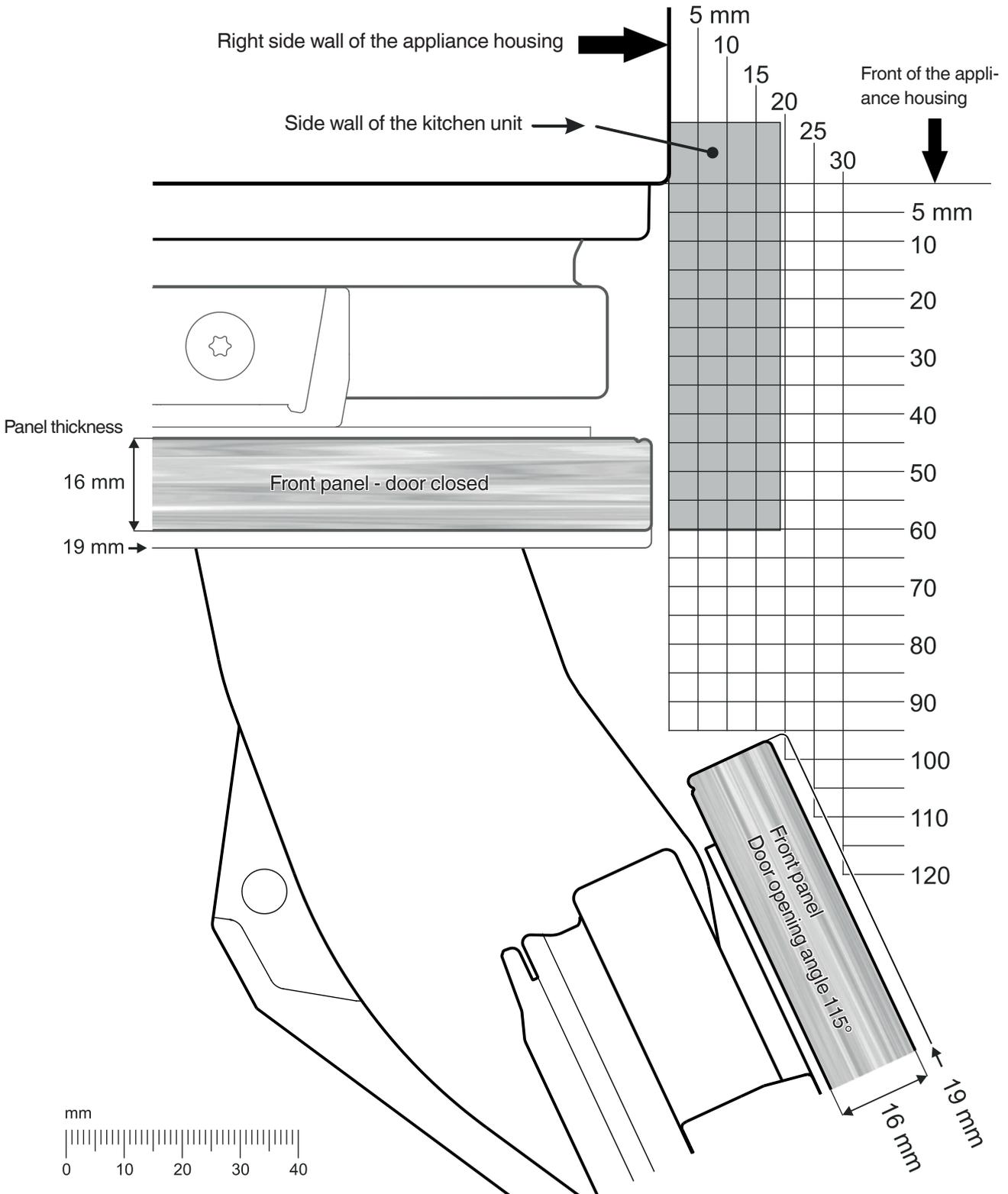
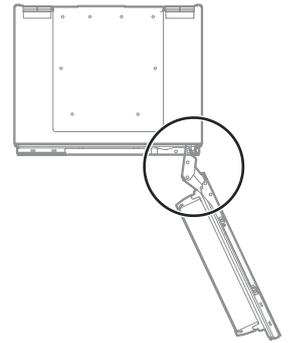
EC(B)N 6156

## Door panel collision grid - internal door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

View from above



# Storage centres for integrated use

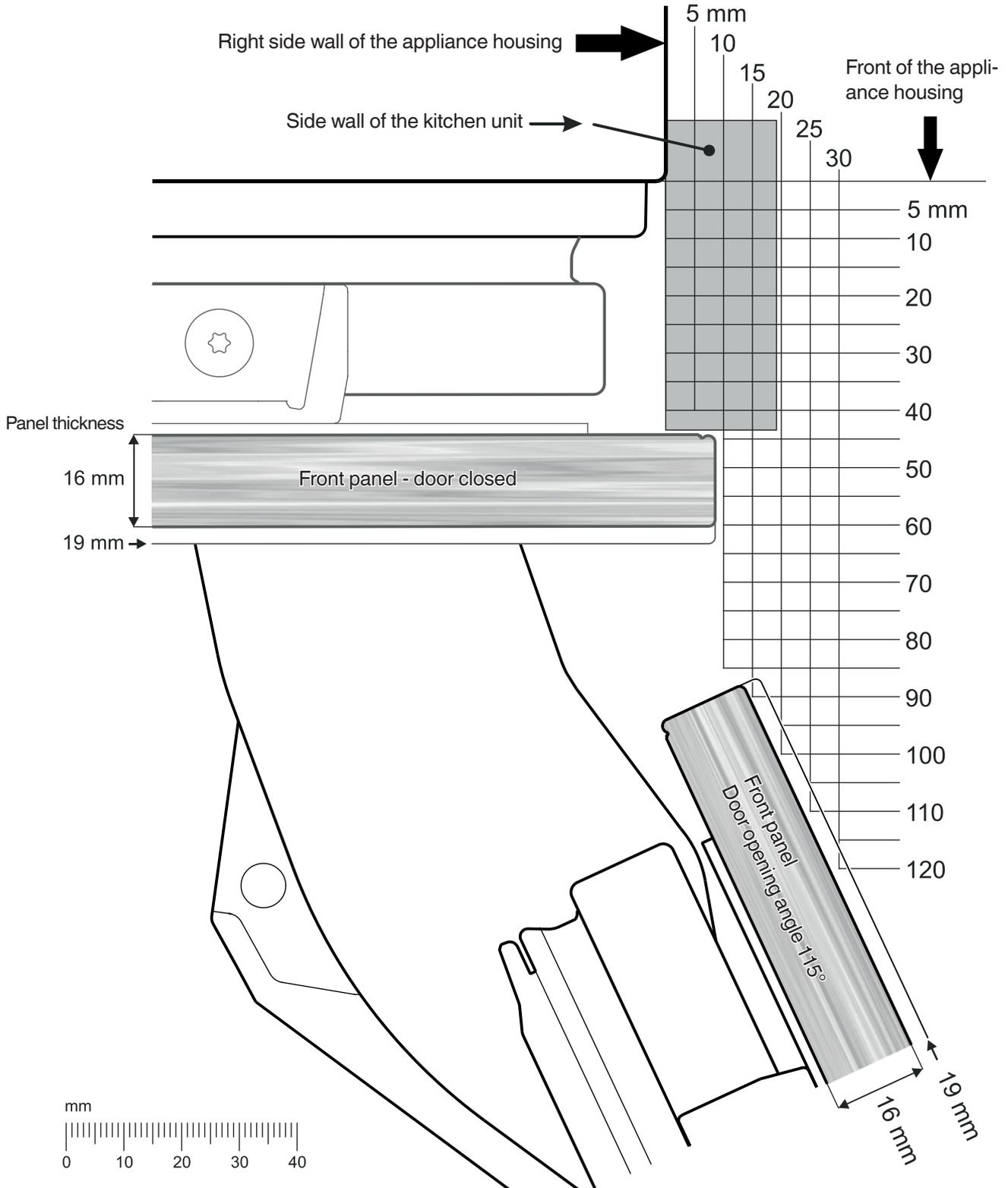
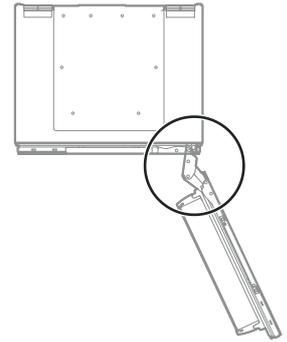
EC(B)N 6156

## Door panel collision grid - external door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

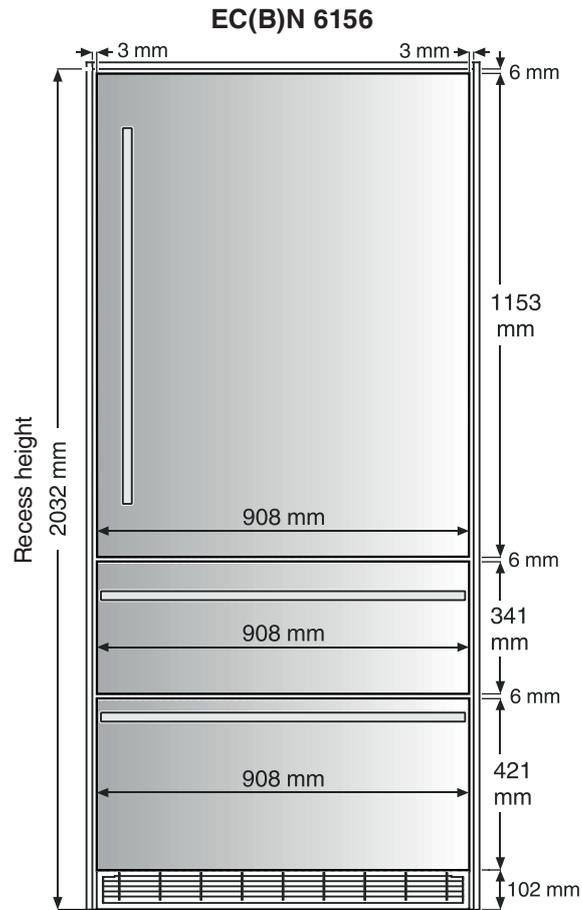
View from above



# Storage centres for integrated use

## EC(B)N 6156

### Panel dimensions for accessory stainless steel panels and gap dimensions

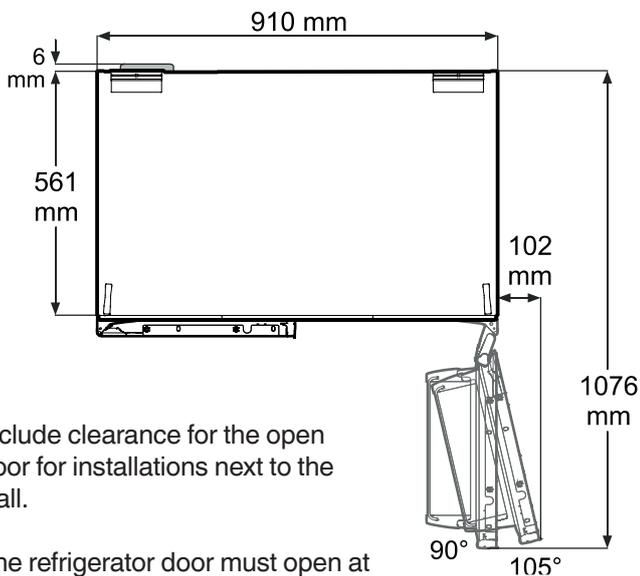
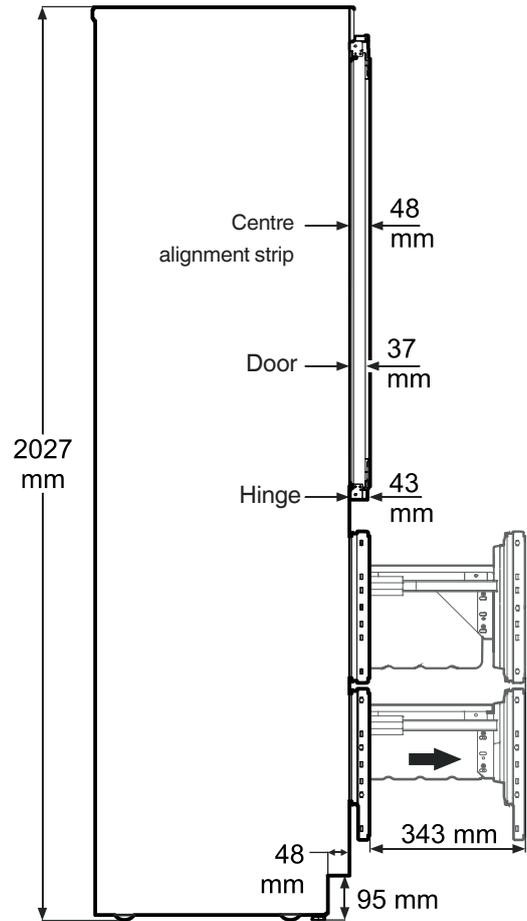
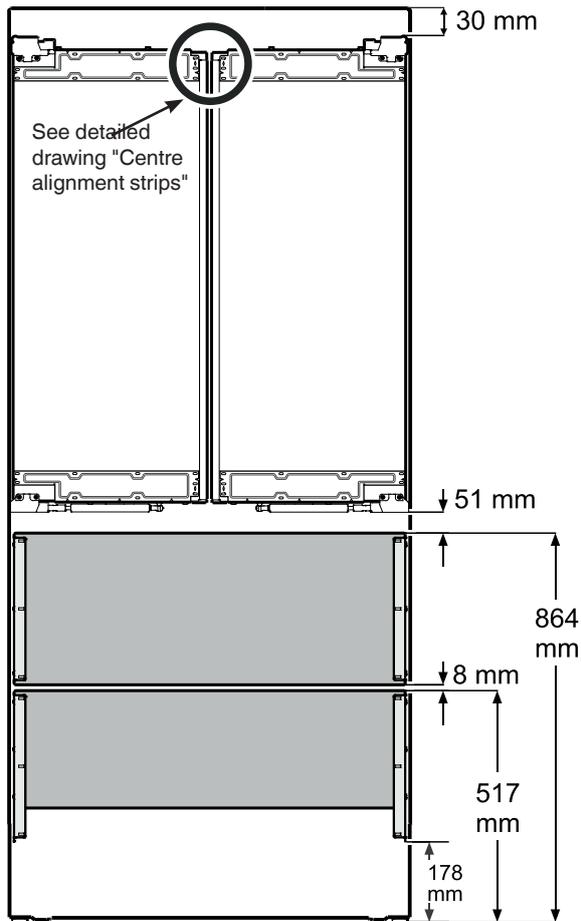




# Storage centres for integrated use

EC(B)N 6256

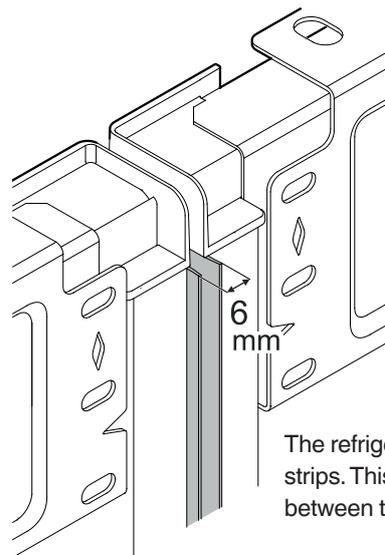
Appliance dimensions (height dimensions are with adjustable feet or castors fully screwed in)



Include clearance for the open door for installations next to the wall.

The refrigerator door must open at least 90° to enable the drawers in the refrigerator to be opened fully and the storage racks to be removed easily.

## Detailed drawing Centre alignment strips



The refrigerator panels strike these strips. This produces a gap of 6 mm between the refrigerator panels.

# Storage centres for integrated use

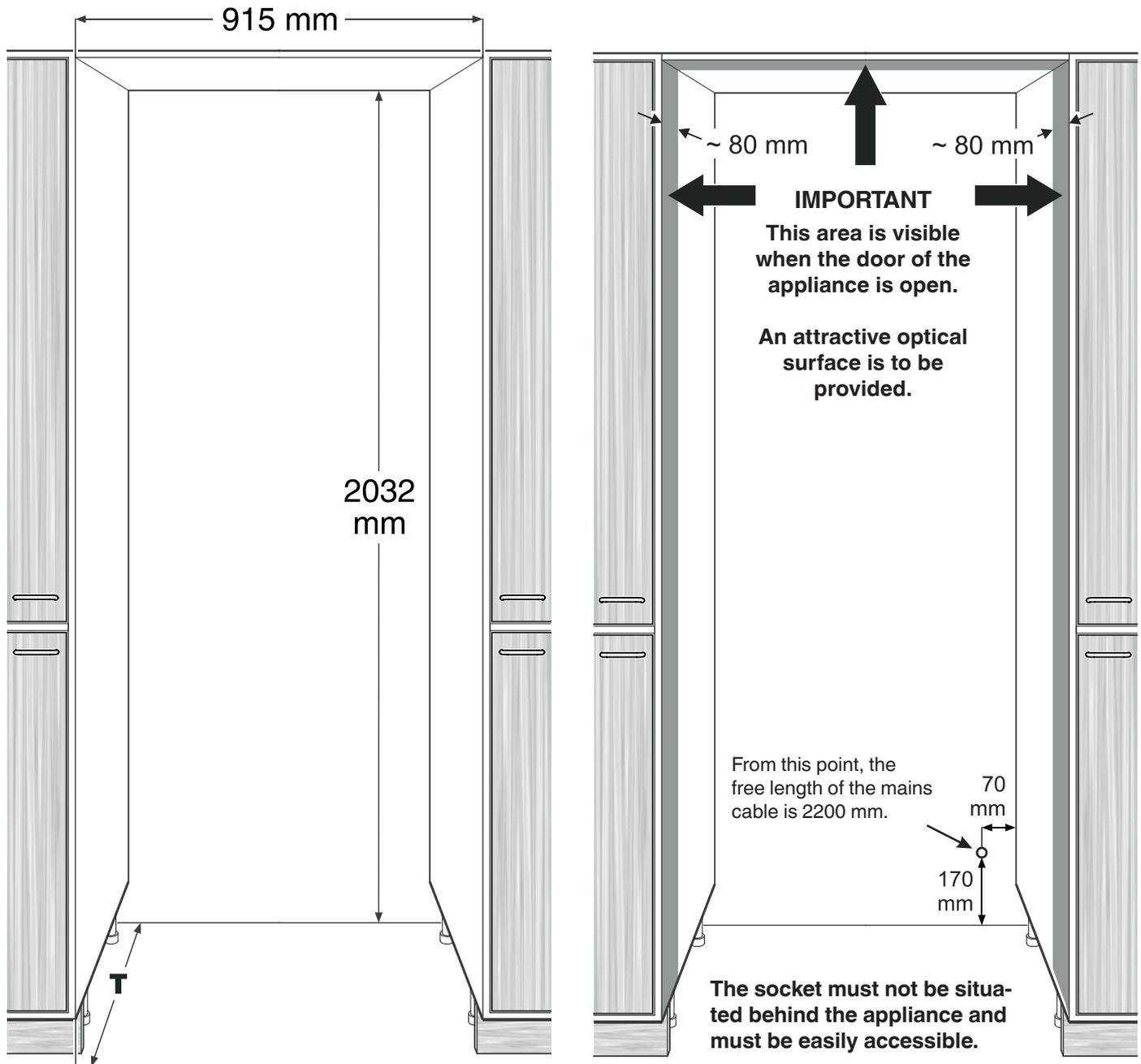
EC(B)N 6256

## Recess dimensions

The appliance stands on the floor between two kitchen units.

If the appliance is integrated into a kitchen unit, the panel width must be adjusted accordingly.

The dimensions quoted in the section entitled "Panel dimensions" are without a separate kitchen unit.



Recess depth **T** for installations with external door panel = 610 mm

Recess depth **T** for installations with internal door panel = 610 mm + **panel thickness**

### Note

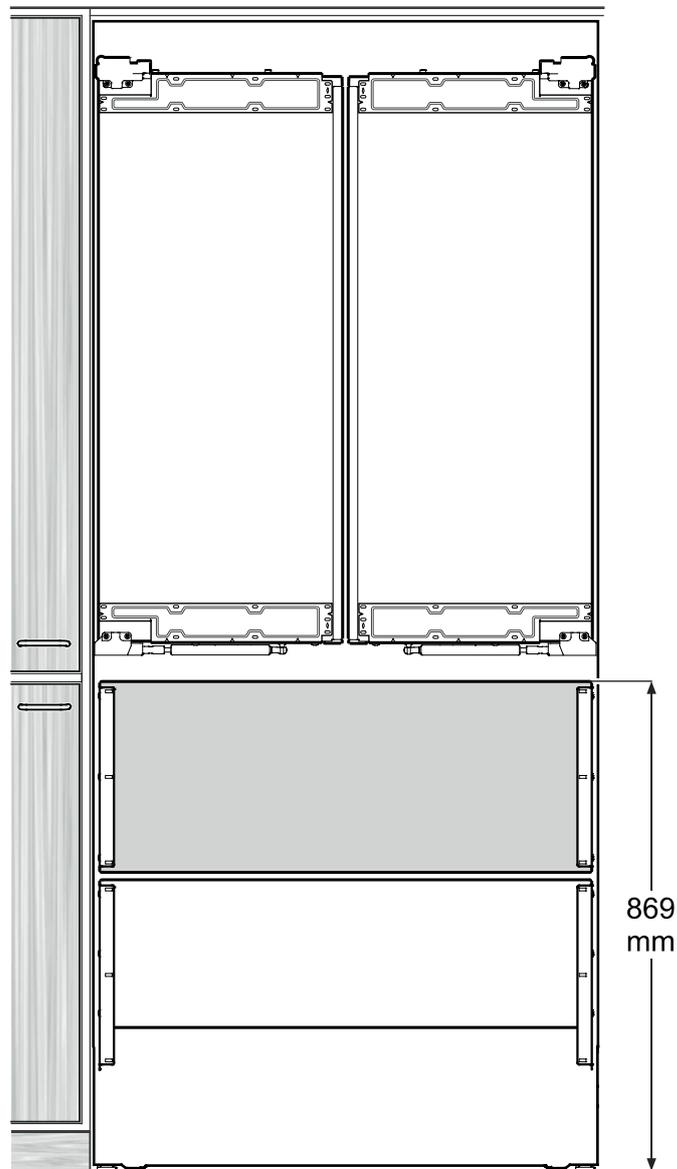
20 mm thick stainless steel panels for internal installation are available as accessories. If these panels are used, a recess depth of 630 mm is required.

## Storage centres for integrated use

---

EC(B)N 6256

Height adjustment in the recess



Adjust the appliance in the recess to a **reference height** of **869 mm**, measured from the floor to the top of the upper freezer drawer.

### **IMPORTANT**

**This height adjustment is very important. It provides the basis for the correct positioning of the front panels.**



# Storage centres for integrated use

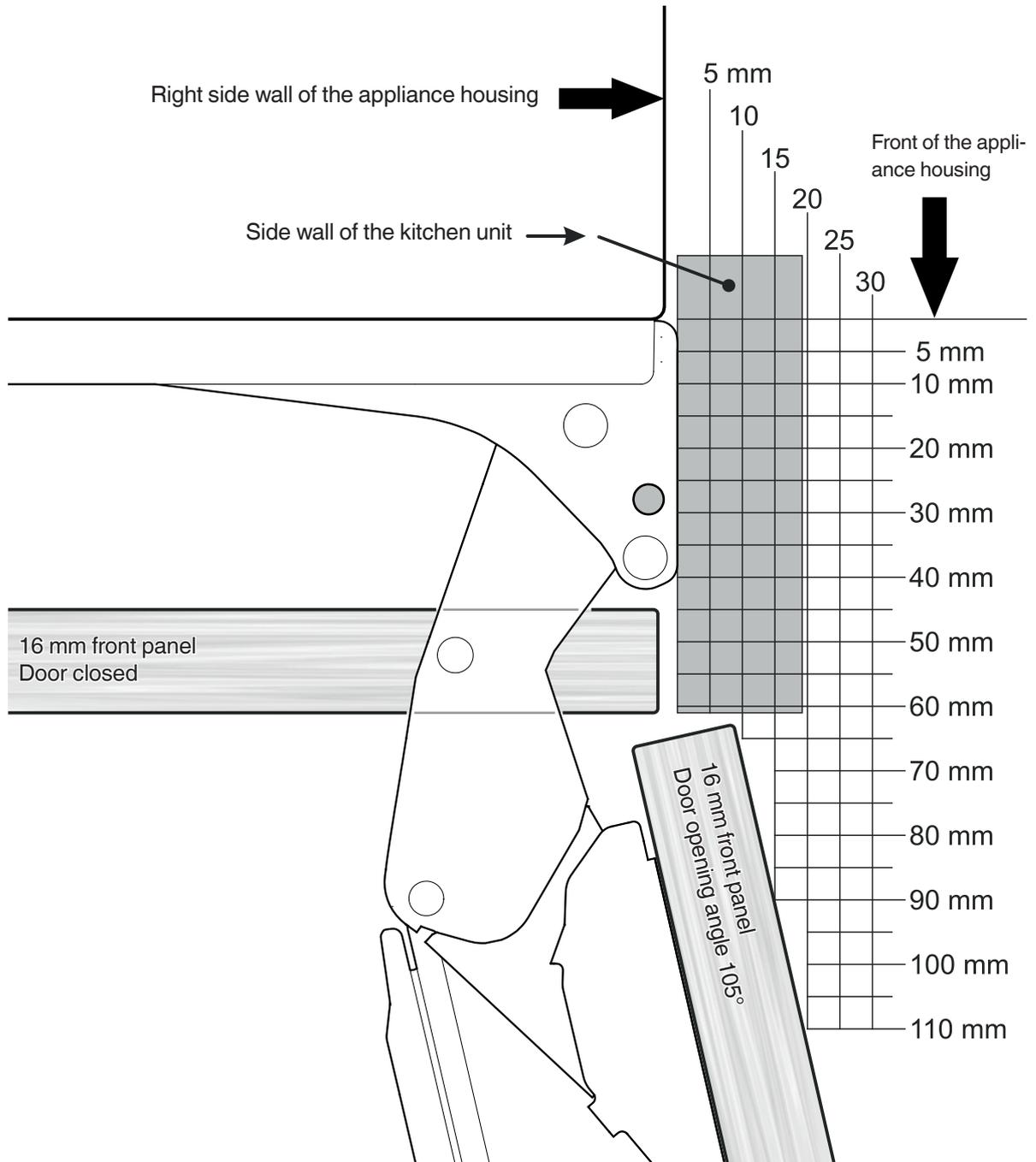
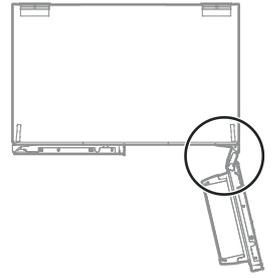
## EC(B)N 6256

### Door panel collision grid - 16 mm internal door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

View from above



# Storage centres for integrated use

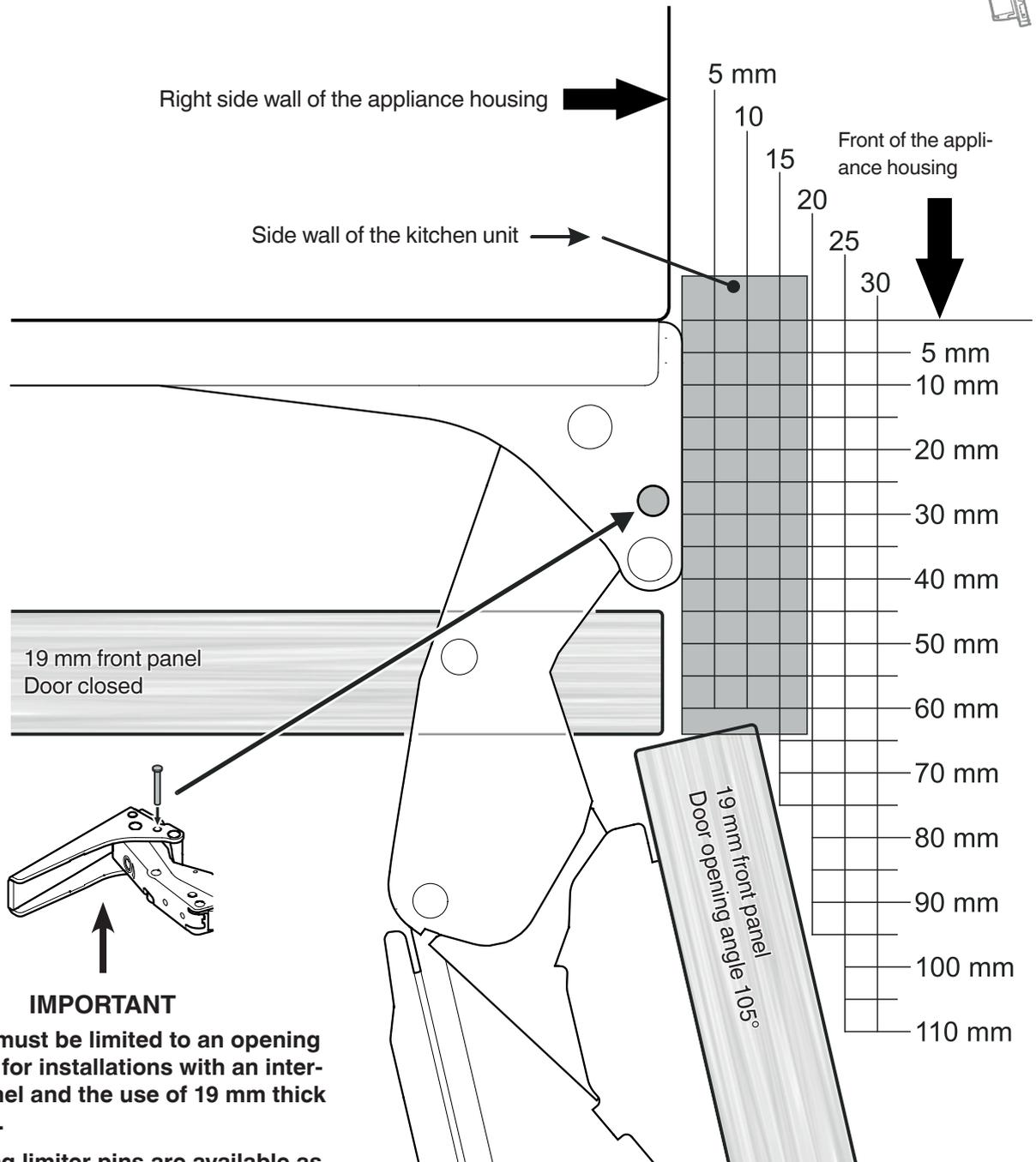
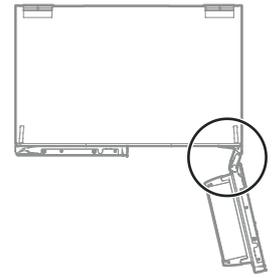
EC(B)N 6256

## Door panel collision grid - 19 mm internal door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

View from above

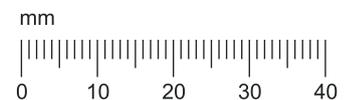


**IMPORTANT**

The hinges must be limited to an opening angle of 95° for installations with an internal door panel and the use of 19 mm thick front panels.

Door opening limiter pins are available as accessories.

The panel will collide with the front frame of the kitchen unit at an opening angle of 105°.



# Storage centres for integrated use

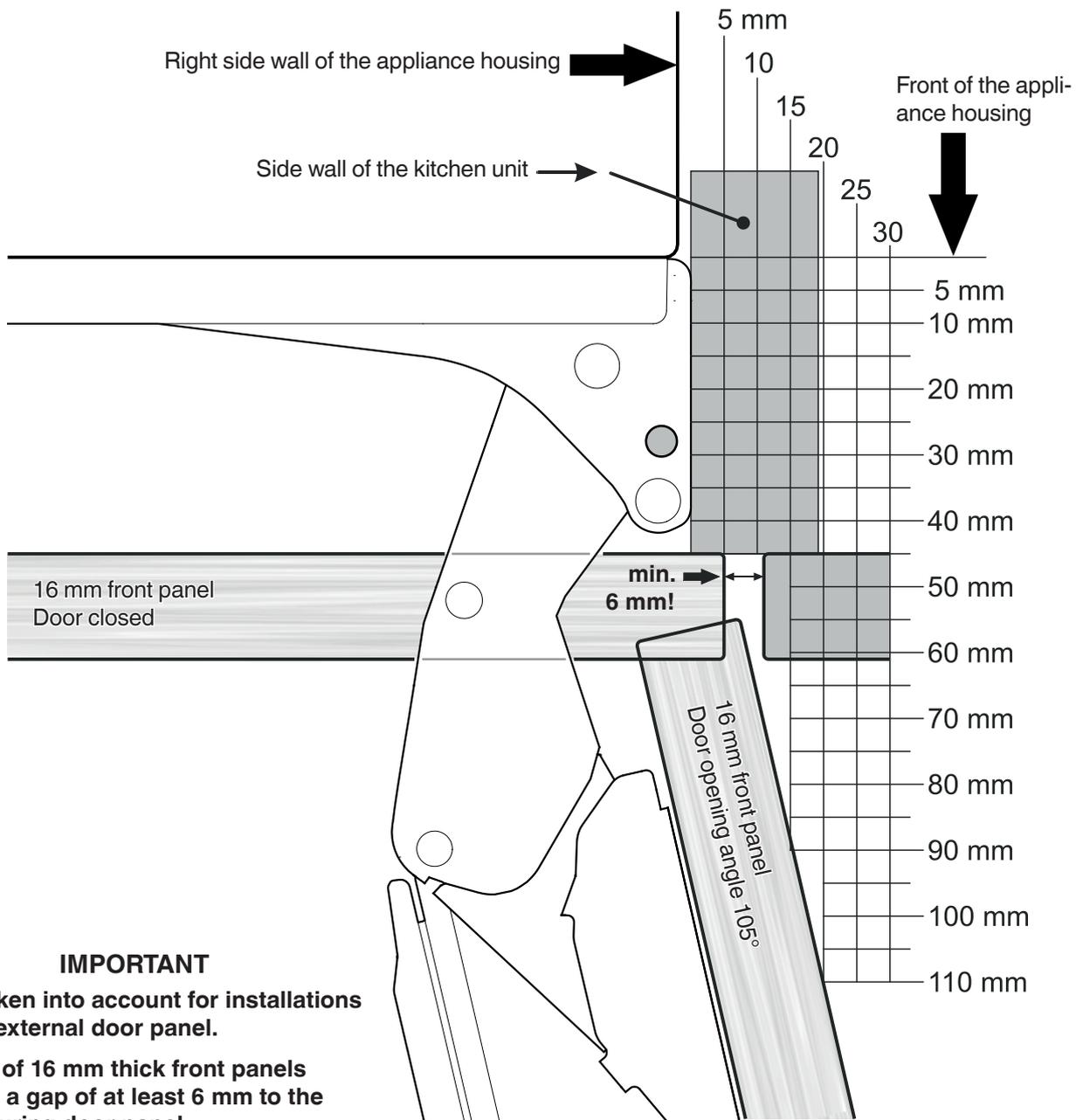
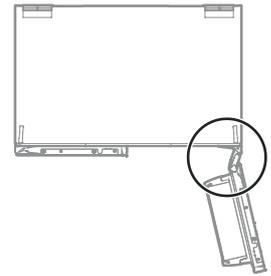
EC(B)N 6256

## Door panel collision grid - 16 mm external door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

View from above

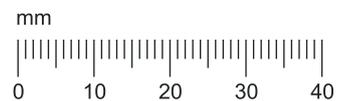


### IMPORTANT

To be taken into account for installations with an external door panel.

The use of 16 mm thick front panels requires a gap of at least 6 mm to the neighbouring door panel.

If the gap is less than 6 mm, the front vertical edge of the door panel will collide with the front vertical edge of the neighbouring panel when the door is opened.



# Storage centres for integrated use

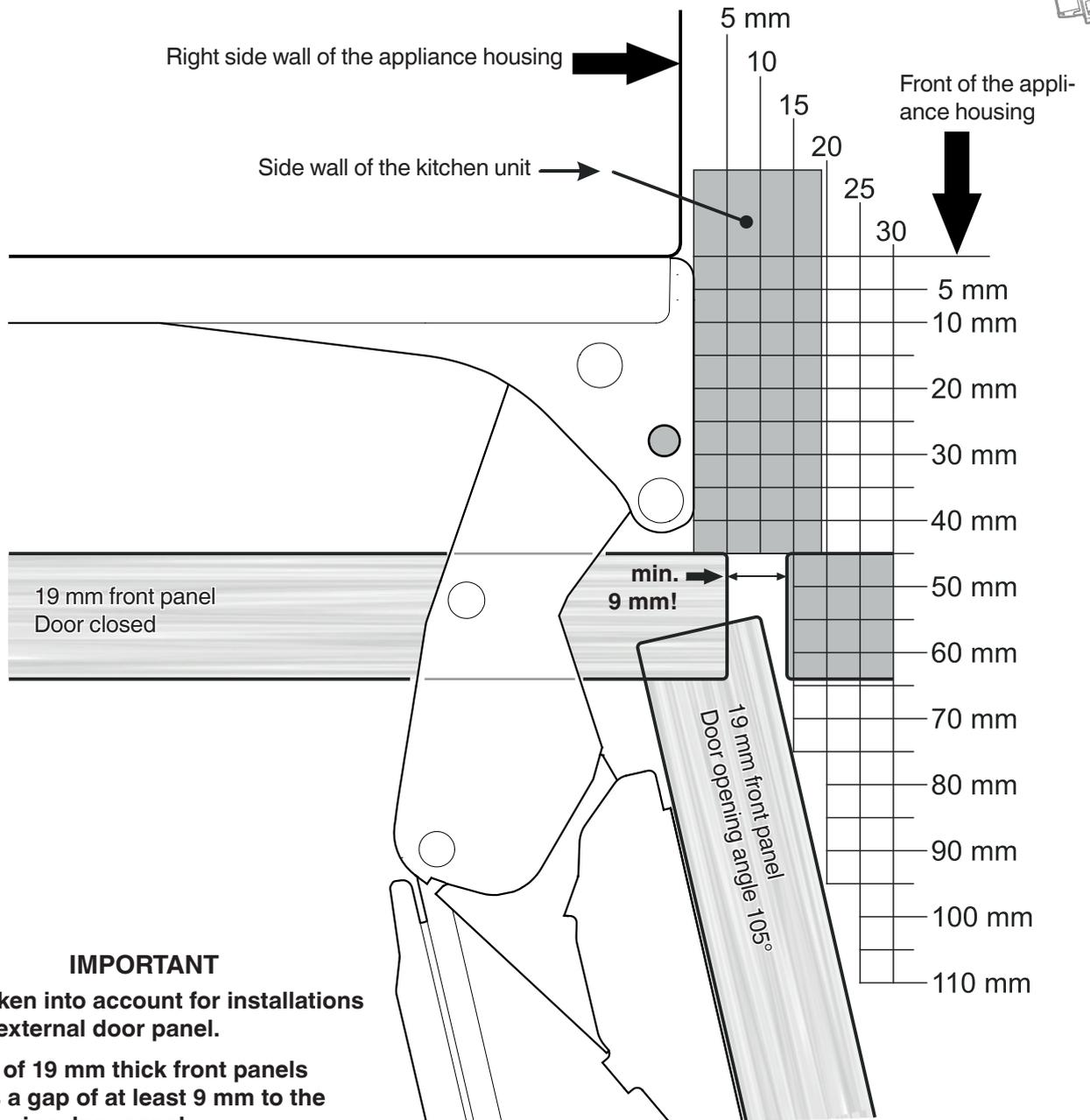
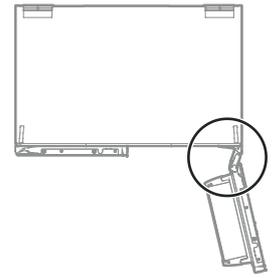
EC(B)N 6256

## Door panel collision grid - 19 mm external door panel

The illustration shows the gaps required to avoid collisions with neighbouring parts when the door is opened.

The illustration is in original size. If you print out this page, ensure that no scaling has been set in the printer options.

View from above



### IMPORTANT

To be taken into account for installations with an external door panel.

The use of 19 mm thick front panels requires a gap of at least 9 mm to the neighbouring door panel.

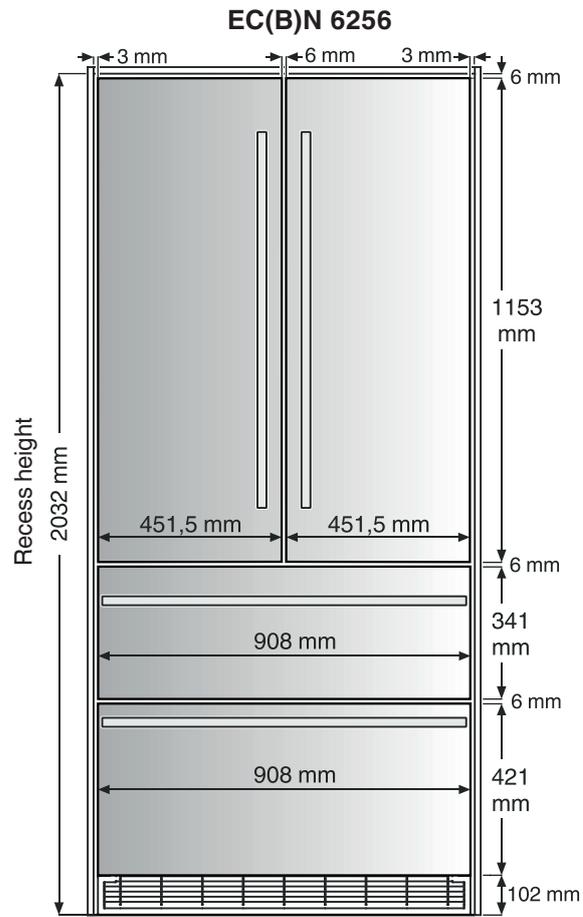
If the gap is less than 9 mm, the front vertical edge of the door panel will collide with the front vertical edge of the neighbouring panel when the door is opened.



# Storage centres for integrated use

## EC(B)N 6256

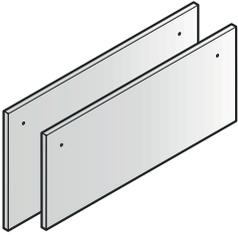
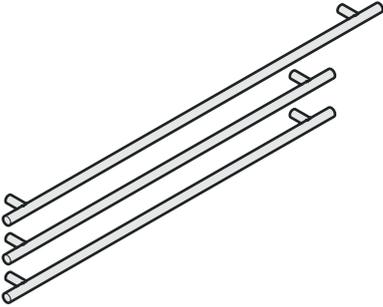
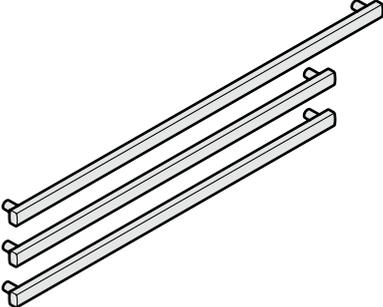
### Panel dimensions for accessory stainless steel panels and gap dimensions



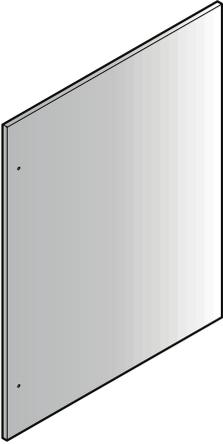
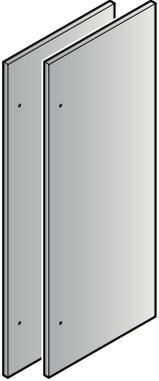
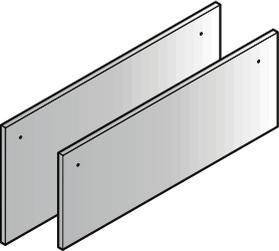


## Storage centres for integrated use

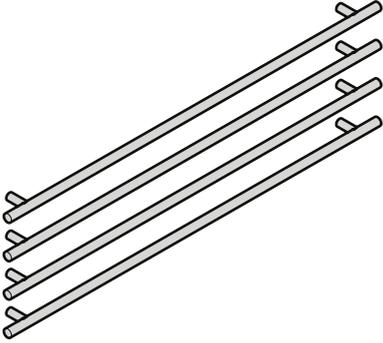
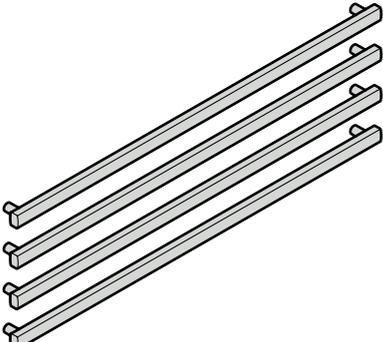
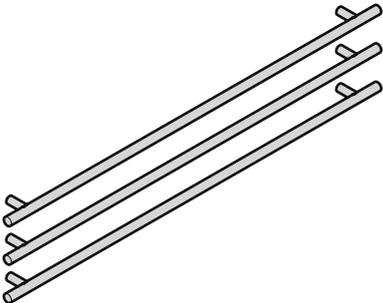
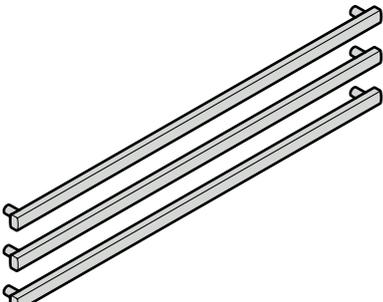
### Accessories

| Illustration  | Part No.    | Description  | For use with model |
|---|-------------|--|--------------------|
|    | 9900 287-00 | Stainless steel panel, refrigerator door (installations with internal door panel only) | ECBN 5066          |
|   | 9900 283-00 | Stainless steel panel, freezer drawers (installations with internal door panel only)   | ECBN 5066          |
|  | 9900 279-00 | Stainless steel handle set   | ECBN 5066          |
|  | 9900 281-00 | Aluminium handle set   | ECBN 5066          |
|   |             |  |                    |

## Storage centres for integrated use

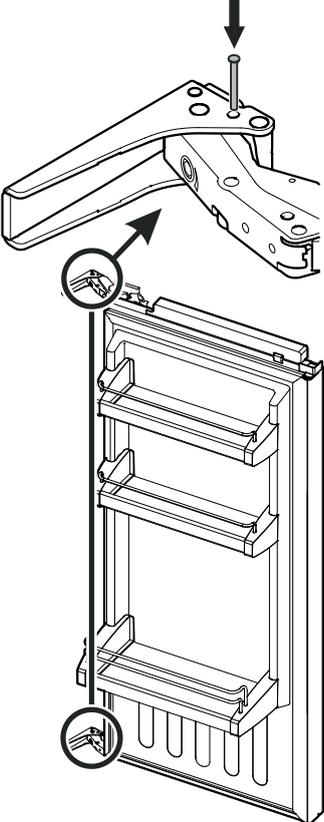
| Illustration  | Part No.    | Description   | For use with model         |
|---|-------------|---|----------------------------|
|    | 9900 333-00 | Stainless steel panel, refrigerator door<br>(installations with internal door panel only)   | EC(B)N 6156                |
|   | 9900 337-00 | Stainless steel panel, refrigerator door<br>(installations with internal door panel only)<br><br><p style="text-align: center;"><b>Note</b></p> <p>The use of these panels requires the door opening to be limited to 95°.</p> <p>The door opening limiter pins (Part No. 9096 214-00) must be inserted into the hinges (see Accessories, page 31).</p> | EC(B)N 6256                |
|  | 9900 323-00 | Stainless steel panel, freezer drawers<br>(installations with internal door panel only)   | EC(B)N 6156<br>EC(B)N 6256 |
|   |             |   |                            |

## Storage centres for integrated use

| Illustration  | Part No.    | Description                | For use with model |
|---|-------------|----------------------------|--------------------|
|    | 9900 339-00 | Stainless steel handle set | EC(B)N 6256        |
|   | 9900 513-00 | Aluminium handle set       | EC(B)N 6256        |
|  | 9900 327-00 | Stainless steel handle set | EC(B)N 6156        |
|  | 9900 329-00 | Aluminium handle set       | EC(B)N 6156        |
|   |             |                            |                    |



## Storage centres for integrated use

| Illustration   | Part No.    | Description  | For use with model |
|--|-------------|--|--------------------|
|  | 9096 214-00 | Door opening limiter pins<br>Limit the opening angle of the door hinges to 95°<br>Contains 2 pins with installation instructions | EC(B)N 6256        |

