

SMU tüüpi metallist sise- ja välisuste paigaldusjuhend ET

SMU-Type Metal Internal and External Door Installation Manual EN

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Paigaldusjuhend/ Installation guide

Paigalduse eeldused ja nõuded/ Installation prerequisites and requirements

Eesti:

- Avatäite transportimisel väldi vigastuste tekkimist. Avatäidet kaitsta papi, kile vms materjaliga.
- Kontrolli ava/avatäite mõõte, põranda tasapinda ja seina tugevust.
- Tulekindla ukse puhul järgi alati tootja paigaldusnõudeid (tabel 1).
- Vahu või villaga paigaldades on paigaldusvahe maksimaalne laius 30mm.
- Paigalda leng vastavalt valmis põranda kõrgusele.
- Täida ava ja lengi vahe sobiva isolatsioonimaterjaliga.
- Veendu sobivate kinnitusvahendite olemasolus, vastavalt seina tüübile ja paigalduspilule.

English:

- Avoid damage during transport of the door set. Protect the door set with cardboard, plastic film, or similar material.
- Check the dimensions of the opening and the door set, the floor level, and the wall strength.
- For fire-rated doors, always follow the manufacturer's installation requirements (Table 1).
- When installing with foam or mineral wool, the maximum installation gap width is 30 mm.
- Install the frame in accordance with the finished floor level.
- Fill the gap between the opening and the frame with a suitable insulation material.
- Ensure that suitable fasteners are available according to the wall type and the installation gap.

Tabel 1. Avatäidete lengi ja seina vahelise vahe isolatsioonimaterjalid ja lengi kinnitusvahendid

	Tuleklassita avatäide	SMU101/201 EI30/EI60	SMU103 EI60	SMU110/210 EI120 ja SMU101/201 EI20/E90	RC2 RC3 RC4	S _a /S ₂₀₀	SMU EXR
Lengi ja seina vahelise pilu isolatsioonimaterjalid							
Vill: Euroclass A1, >30kg/m ³ Paroc eXtra, Roxrema, Paroc FPY, Rockwool Ultra	x	x	x	x	x	x**	x
Soudal Soudafoam FR	x	x			x	x	x
Penosil Premium Gunfoam Fire Rated Või muu, vähemalt Euroclass B-s1,d0	x	x	x	x*	x	x	x
Tuletõkkeklassita avatäidete paigaldusvaht	x				x		x
Kinnitusvahendite miinimumnõuded							
Betoonikruvi Ø7,5x82	x	x	x	x	x	x	x
Fibrokruvi Ø8x90mm	x	x	x	x	x	x	x
Metallikruvi isepuuriv Ø6,3x55	x	x	x			x	
Ø5x60mm + tüübel	x	x				x	
AH28 M16x28 + kruvi Ø6x65mm (Adjufix)	x	x				x	
AH28 M16x28 + kruvi Ø7.5x82mm (Adjufix)	x	x		x	x	x	x
Läve kinnitus: Ø7.5x42mm	x	x		x	x	x	x

Paigaldusvahe kuni 30mm

* Paigaldusvahe kuni 15mm

**Kui kasutad vahe täitematerjalina mineraalvilla siis kata vill akrüüli või mastiks

- Tabelis nimetatata Tammeri ustele deklareeritavate väärtustega, nagu helipidavus, kuulikindlus või muu, tuleb paigaldus- ja isolatsiooni-vahendite valikul lähtuda uksetüübi muudest parameetritest, nagu tulepüsivus või plahvatuskindlus.
- Kuulikindlusega ukse paigaldamisel tuleb kasutada uksekomplektiga kaasas olevaid paigaldusliiste.
- Akrüül või mastiks tuleb valida ukse kasutuskeskkonnale sobiv, Euroklass F või parem.

Table 1. Insulation materials and fastening requirements for the gap between the door frame and the wall

	non-fire-rated door	SMU101/201 EI30/EI60	SMU103 EI60	SMU110/210 EI120 and SMU101/201 EI20 / E90	RC2 RC3 RC4	S _a /S ₂₀₀	SMU EXR
Insulation and sealing materials for the perimeter gap between the frame and wall							
Wool: Euroclass A1, Density >= 30kg/m ³ Paroc eXtra, Roxrema, Paroc FPY, Rockwool Ultra	x	x	x	x	x	x**	x
Soudal Soudafoam FR	x	x			x	x	x
Penosil Premium Gunfoam Fire Rated or other at least Euroclass B0-s1,d0	x	x	x	x*	x	x	x
Non fire rated installation foam	x				x		x
Minimum required dimensions for frame fasteners							
Concrete screw Ø7,5x82	x	x	x	x	x	x	x
Screw for Lightweight concrete blocks Ø8x90mm	x	x	x	x	x	x	x
Self drilling screw for metal Ø6,3x55	x	x	x			x	
Screw with towel Ø5x60mm	x	x				x	
AH28 M16x28 mounting sleeve + Ø6x65mm screw (Adjufix)	x	x				x	
AH28 M16x28 mounting sleeve + Ø7.5x82mm screw (Adjufix)	x	x		x	x	x	x
Threshold mounting screw: Ø7.5x42mm	x	x		x	x	x	x

Installation gap up to 30mm

* Installation gap up to 15 mm

**If using mineral wool as gap-filling material, cover the wool with acrylic or mastic.

- For Tammer doors with declared performance values not specified in the table, such as sound insulation, bullet resistance, or other properties, the selection of installation and insulation materials must be based on the other parameters of the door type, such as fire resistance or blast resistance.
- When installing a bullet-resistant door, the installation strips supplied with the door set must be used.
- The acrylic or mastic must be selected to suit the door's intended operating environment, Euroclass F or better.

Vajalikud töövahendid/ necessary tools



Mõõdulint
measuring tape



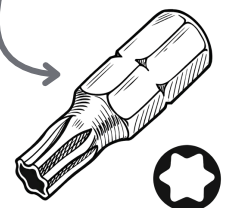
Lööktrell
Rotary hammer for concrete drilling



Kummihaamer aitab detaile paika seada ilma ust või lengi vigastamata.
A rubber mallet is used to position parts without damaging the door or frame.



Akutrell/ akukruvikeeraja kinnitamiseks. **TX30** on kõige tavalisem otsik, kuid otsik sõltub kruvist.
Cordless drill/ screwdriver for fastening. **TX30** is the most common bit, but the bit depends on the screw.

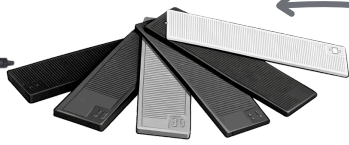




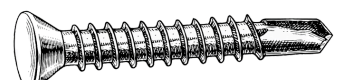
Vesilood ja nivelliir (vajadusel) tagavad täpse loodimise ja kõrgusmõõtmise.
A spirit level (and a laser level if needed) ensure accurate leveling and height measurement.



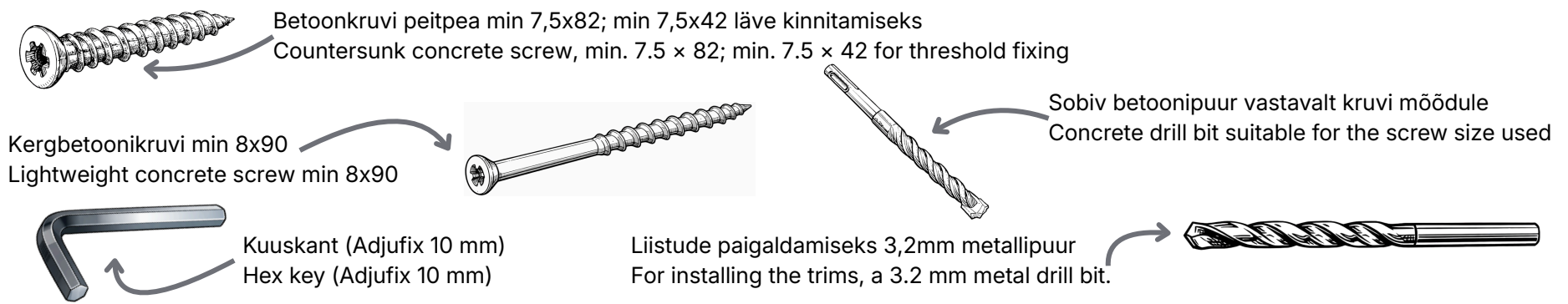
Isolatsioonimaterjalid, vt tabel 1.
Insulation materials, see Table 1.



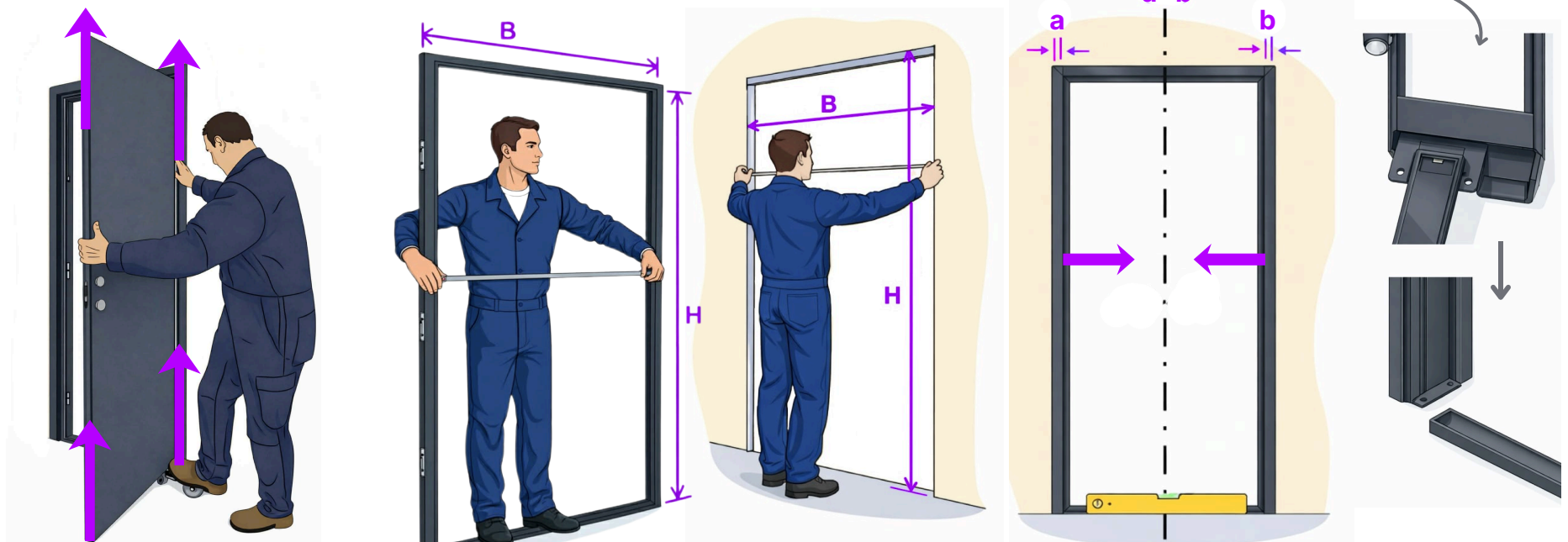
Plastikust (kuni EI60 ukсед)/ metallist paigalduskiilud: 2-6mm (olenev vajadusest)
Plastic (up to EI60)/ metal installation wedges: 2-6mm (depends on the need)



Isepuuriv kruvi 6,3x60
Self-drilling screw 6.3 × 60



⚙ Jälgi, et läveta avatäite puhul paigaldustugi, lengilt ja hiljem abilengilt, saaks enne paigaldust eemaldatud!
Legolengi kokku monteerimise juhend on järgmises ptk-is.
For door sets without a threshold, make sure that the installation support can be removed from the frame, and later from the auxiliary frame, before installation. The assembly instructions for the LEGO frame are provided in the next section.

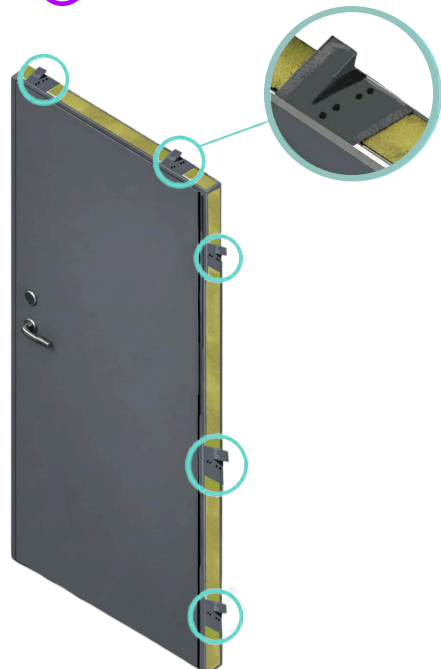


⚙ Eralda ukseleht/lehed ukaselengist, tõstes need hingedelt maha.
Remove the door leaf/leaves from the frame by lifting them off the hinges.

⚙ Veendu ehitusava ja avatäie mõõtude sobivuses.
Make sure that the dimensions of the wall opening and the door set are compatible.

⚙ Aseta avatäite leng ehitusavasse vahetult valmis ja loodis põrandale.
Place the door frame in the wall opening directly onto the finished and level floor.

1



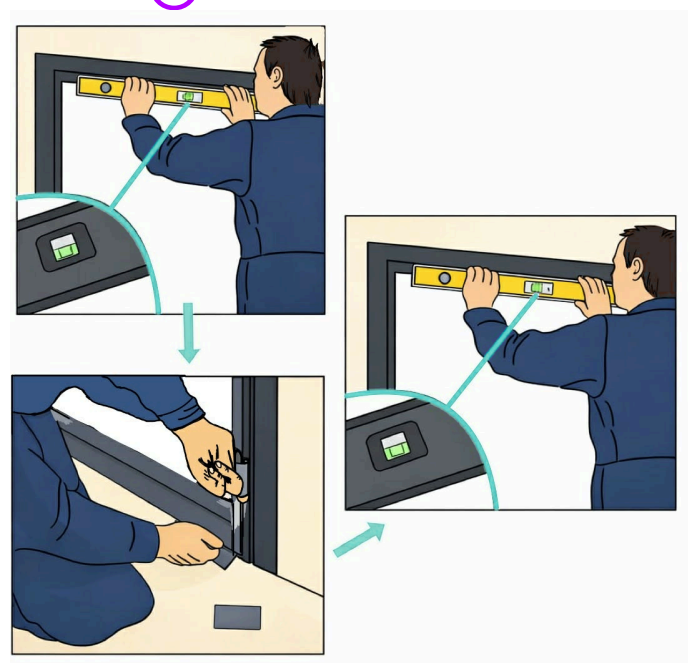
⚙ Painuta avatäite lengi fikseerimiselemendid vastavalt ehitusavale.
Bend the door frame fixing elements according to the structural opening.

2



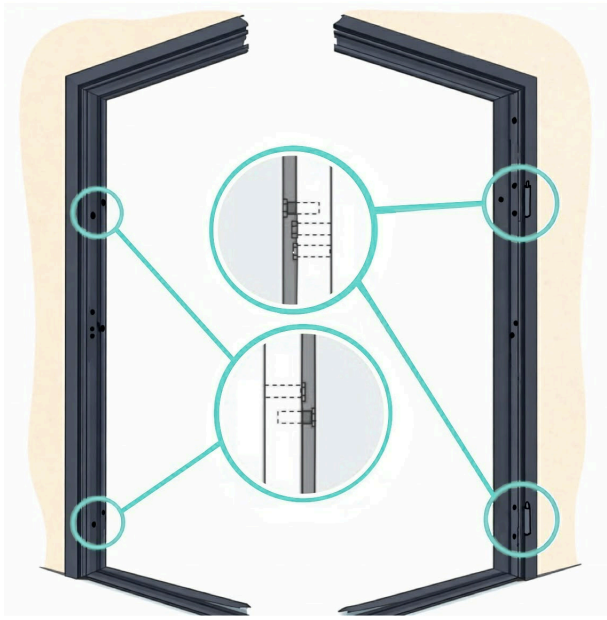
⚙ Nihuta avatäite leng ava keskele ning kontrolli loodiga, et see on õigesti paigas nii vertikaalselt, kui horisontaalselt. Vajadusel toesta ja joonda kogu leng paigalduskiiludega seinavasse.
Position the door frame in the center of the opening and check with a spirit level that it is correctly aligned both vertically and horizontally. If necessary, support and align the entire frame in the wall opening using installation wedges.

3

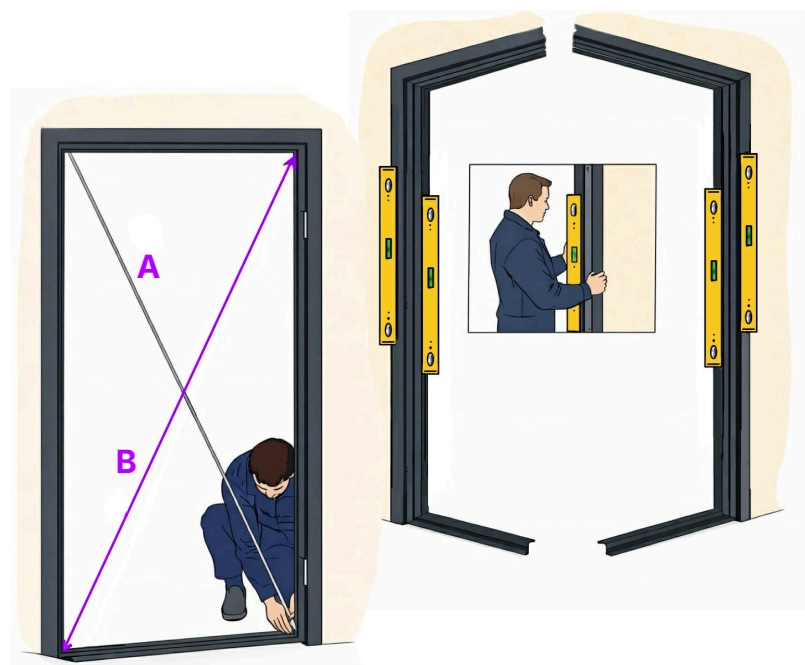


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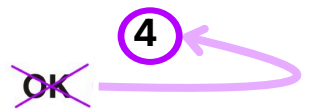


- ⚙️ Paigaldushülsiga avatäite kinnituste puhul reguleeri asendit kuuskandiga (adjufix 10mm) lengihülsse seina poole keerates. Reguleeri paarikaupa luku- ja hingeküljel ning seejärel ka lengi ülaosas.
For fixings with installation sleeves, adjust the position using a hex key (Adjufix 10 mm) by turning the frame sleeves toward the wall. Adjust them in pairs on the lock side and hinge side, and then also at the top of the frame.

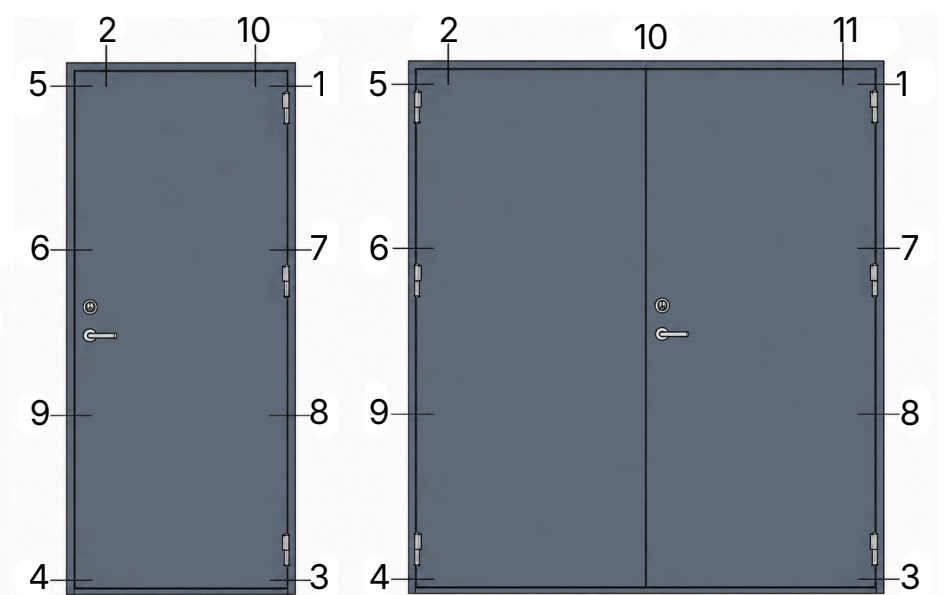
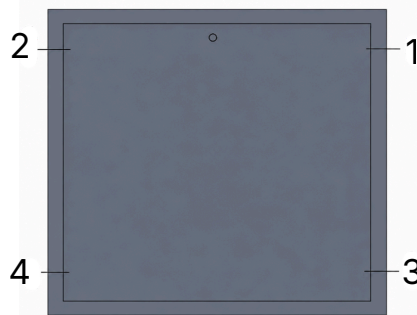
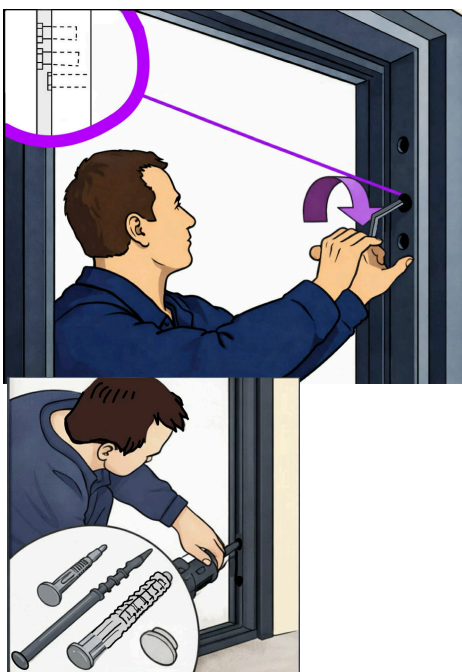


- ⚙️ Kui põrand pole loodis, paigalda kiilud läve alla.
If the floor is not level, install wedges under the threshold.

$$A=B \pm 1\text{mm}$$



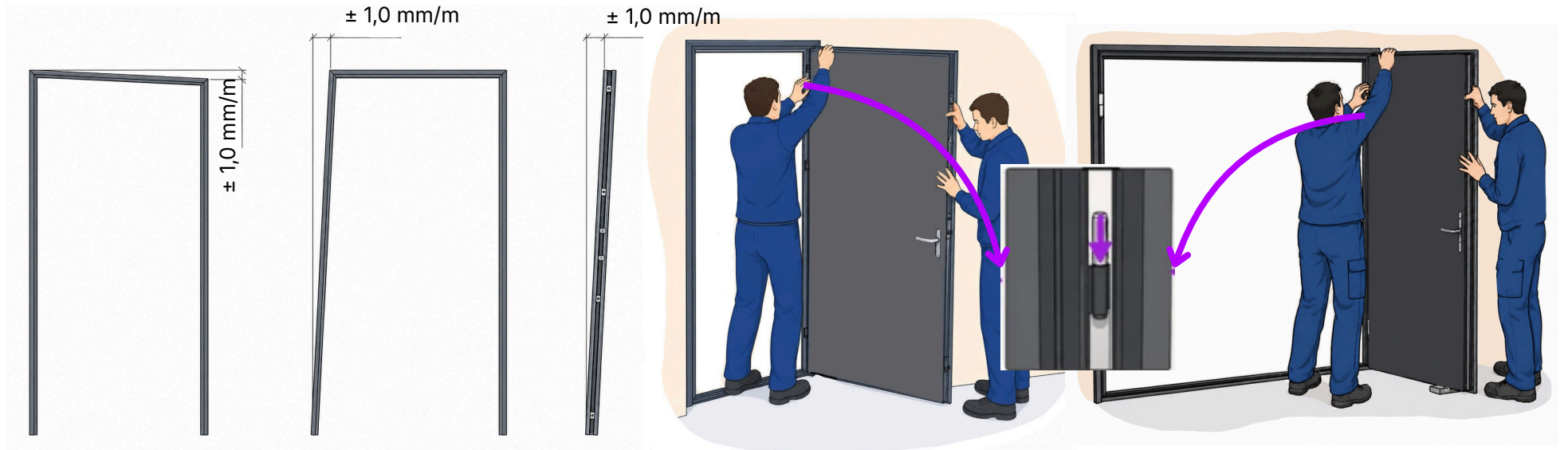
6



- ⚙️ Kinnita leng esmastest kinnituspunktidest vastavalt joonisel näidatud järjekorrale 1, 2, 3. Pärast kinnituste 1 ja 2 paigaldamist kontrolli lengi horisontaalsust loodiga ja vajadusel reguleeri. Pärast kinnituse 3 paigaldamist kontrolli lengi vertikaalsust loodiga ja vajadusel reguleeri.

Secure the frame at the initial fixing points (in order 1, 2, 3) according to the drawing. After fixing fasteners 1 and 2, check the frame level and adjust if necessary. After fixing fastener 3, check the frame plumb and adjust if necessary.

7



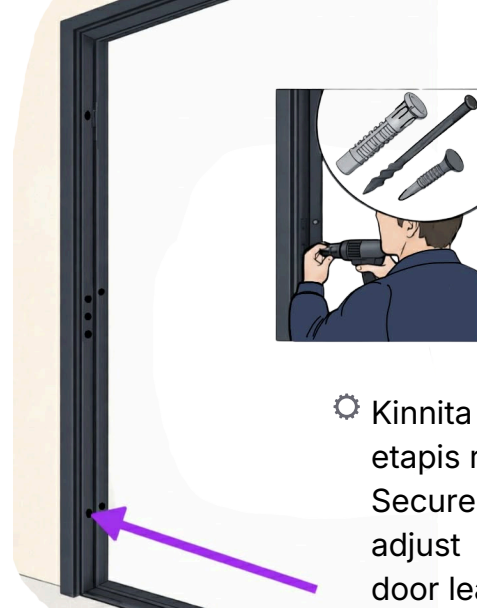
- ⚙ Veendu, et lävi (kui on lävega) ja hingepoolne post oleksid loodis. Vaata lengi paigaldustolerantse!
Make sure the threshold (if present) and the hinge-side jamb are level/plumb. Check the frame installation tolerances.

- ⚙ Paigalda ukseleht/-lehed lengi.
Install the door leaf/leaves in the frame.

8

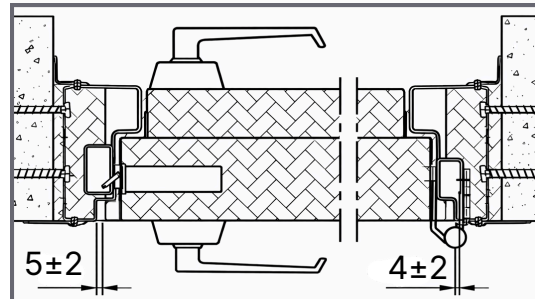
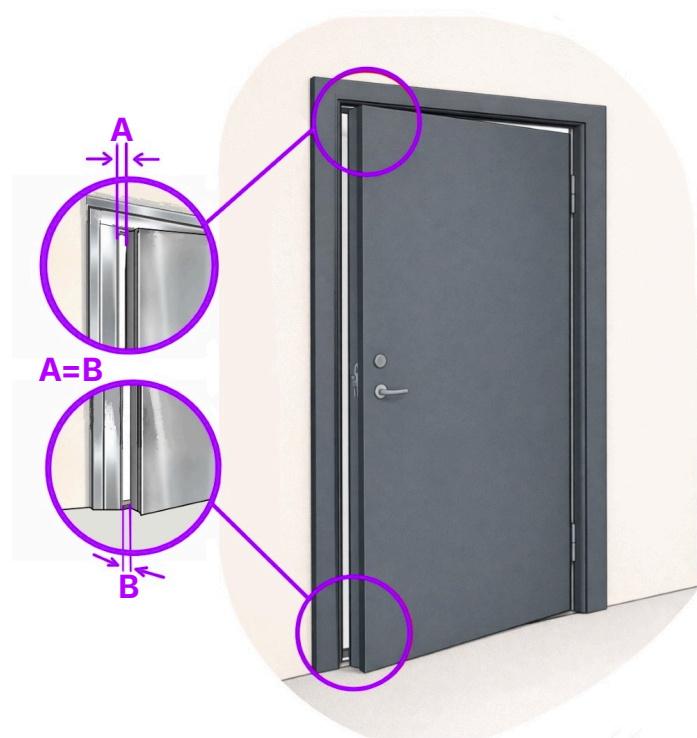


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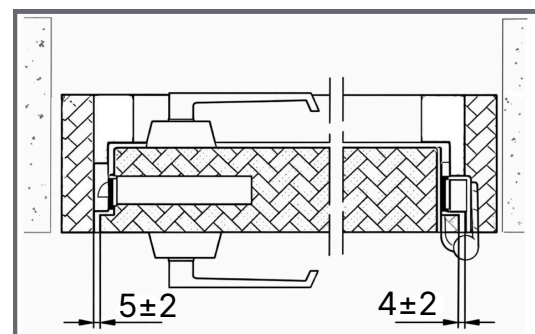


- ⚙ Kinnita kinnitusvahend nr 4. Selles etapis reguleeri leng ukselehe järgi.
Secure fastener No. 4. At this stage, adjust the frame according to the door leaf.

10

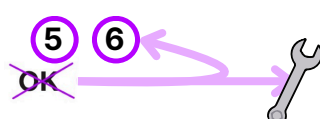


Door leaf-to-frame gap tolerances



Door leaf-to-frame gap tolerances

- ⚙ Kontrolli ukselehe ja lengi vaheliste pilude ühtsust.
Check that the gaps between the door leaf and the frame are even. Adjust the door if necessary.



LENGI REGULEERIMINE/ DOOR FRAME ADJUSTMENT

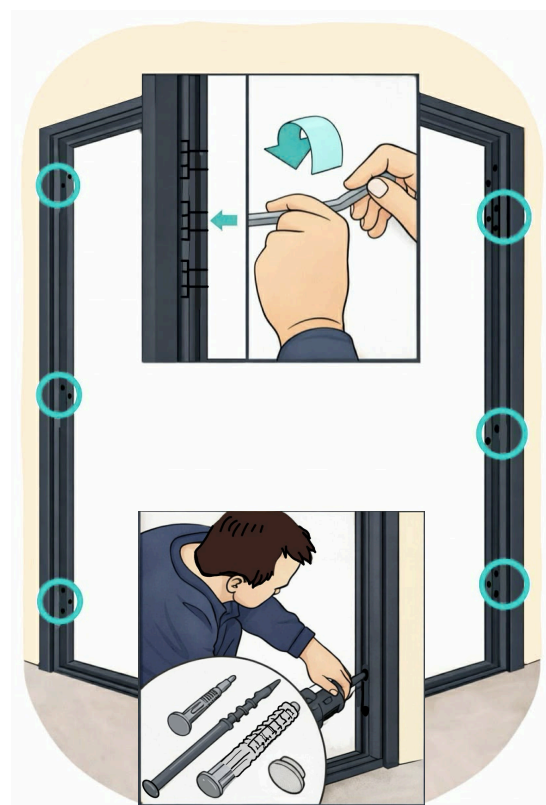
1. Kontrolli enne reguleerimist, et leng oleks loodis, sirge ja diagonaalmõõt õige.
 2. Vabasta hing ja kinnitusplaat enne reguleerimist koormusest.
 3. Reguleeri hinge vähehaaval, kuni lõtk on õige.
 4. Seejärel kinnita kruvid tagasi ja kontrolli ukse liikumist.
1. Before adjustment, check that the frame is level, straight, and square.
 2. Release the hinge and fixing plate from load before adjustment.
 3. Adjust the hinge gradually until the gap is correct.
 4. Then tighten the screws again and check the door movement.

11



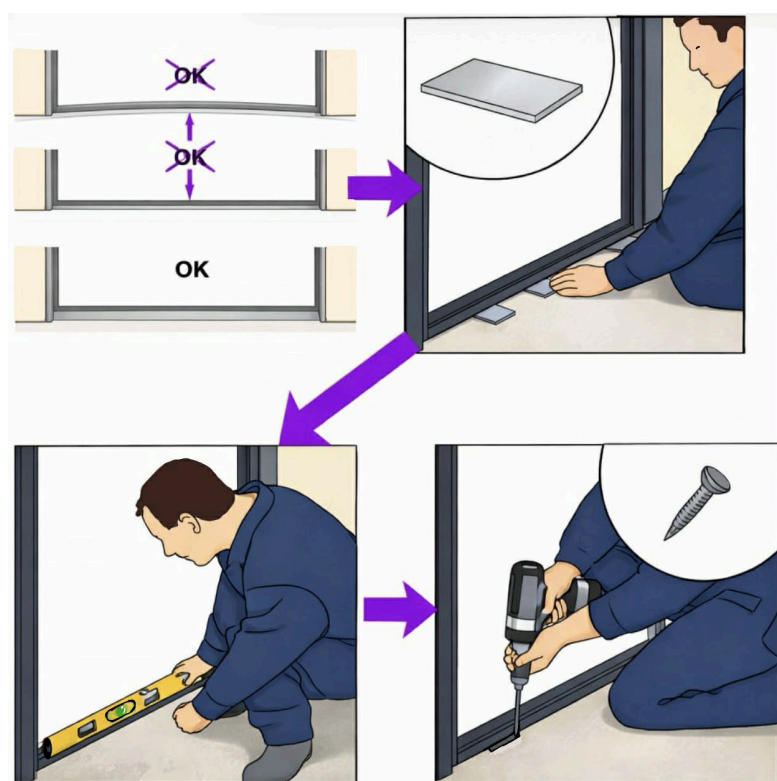
- ⚙️ Hinda tihendust, tõmmates paberit ukselehe ja lengi vahelt. Tihend toimib, kui paber liigub raskelt. Kontrolli riivide/suluste toimivust. Vajadusel reguleeri.
Check the seal with a paper test between the door leaf and frame. If the paper pulls out with resistance, the seal is working. Check latch/lock operation and adjust if needed.

12



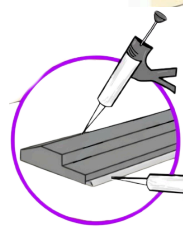
- ⚙️ Kinnita ülejäänud lengi kinnitused. Ülejäänud kinnitamata kinnituste arv sõltub ukse tüübist.
Secure the remaining frame fixings. The number of remaining unfixed fasteners depends on the door type.

13



- ⚙️ Paigalda ja kinnita lävi. Lävi tihenda paigaldusvahu või akrüüluga (tabel 1).
Install and secure the threshold. Seal a threshold with installation foam or acrylic (table 1).

14



- !! Välisustel tuleb silikoonida lävi.
The threshold of exterior doors must be sealed with silicone.

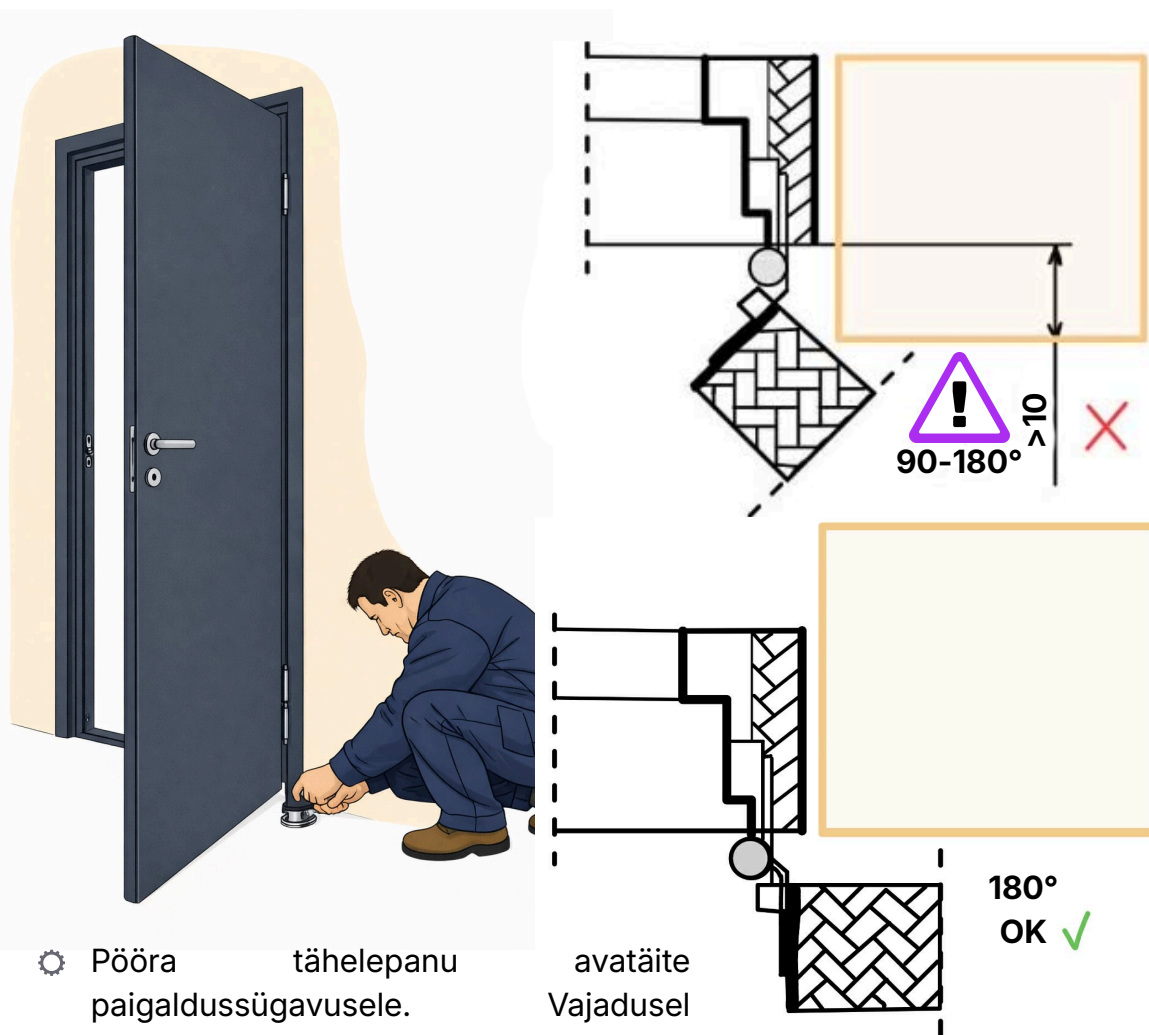
- ⚙️ Täida lengi ja seina vaheline vahe vastavalt tabelile 1. Suitsutõkke puhul tihenda villa pind ühelt poolt hermeetikuga.
Fill the gap between the frame and wall according to the table 1. For smoke-control products, seal the insulation surface on one side with sealant.

15



- Paigalda kinnitusavade peitekorgid. Paigalduspilu katmiseks võib kasutada tuletõkke teipi, puit ja metallist piirdeliiste ning seina viimistlusmaterjale nagu kips või krahv. Install the cover caps for the fixing holes. To cover the installation gap, fire-resistant tape, wooden or metal cover trims, and wall finishing materials such as gypsum board or plaster may be used.

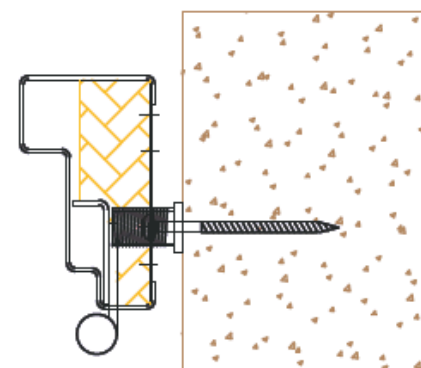
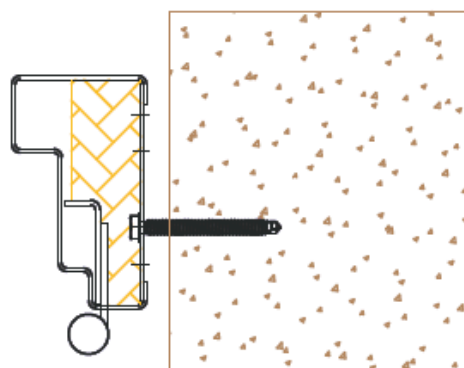
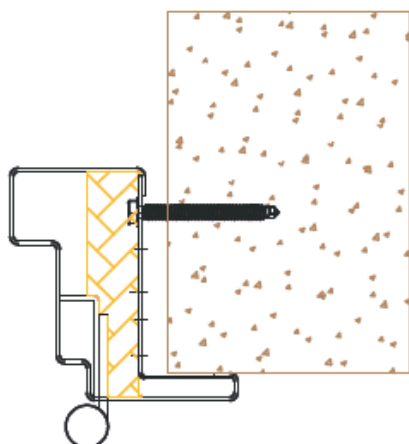
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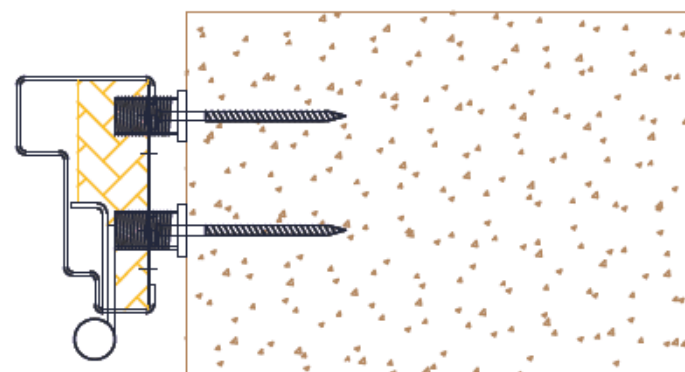
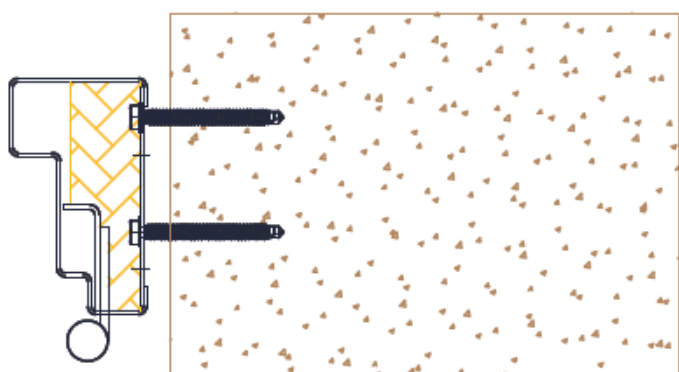
- Pööra tähelepanu paigaldussügavusele. avatäite Vajadusel paigalda avatäite tükis. Pay attention to the installation depth of the door set. Install a door stop if necessary.

17

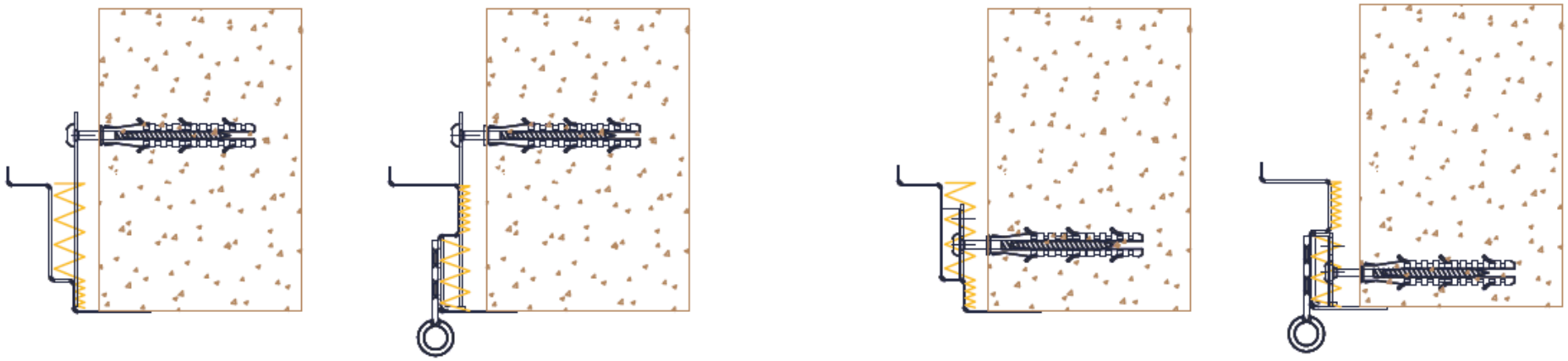
UKSE PAIGALDUS EHITUSAVASSE/ DOOR INSTALLATION INTO THE DOOR OPENING



Joonis 1. Standardne kinnituspunkt ühe kinnitusega / Figure 1. Standard single point fixings



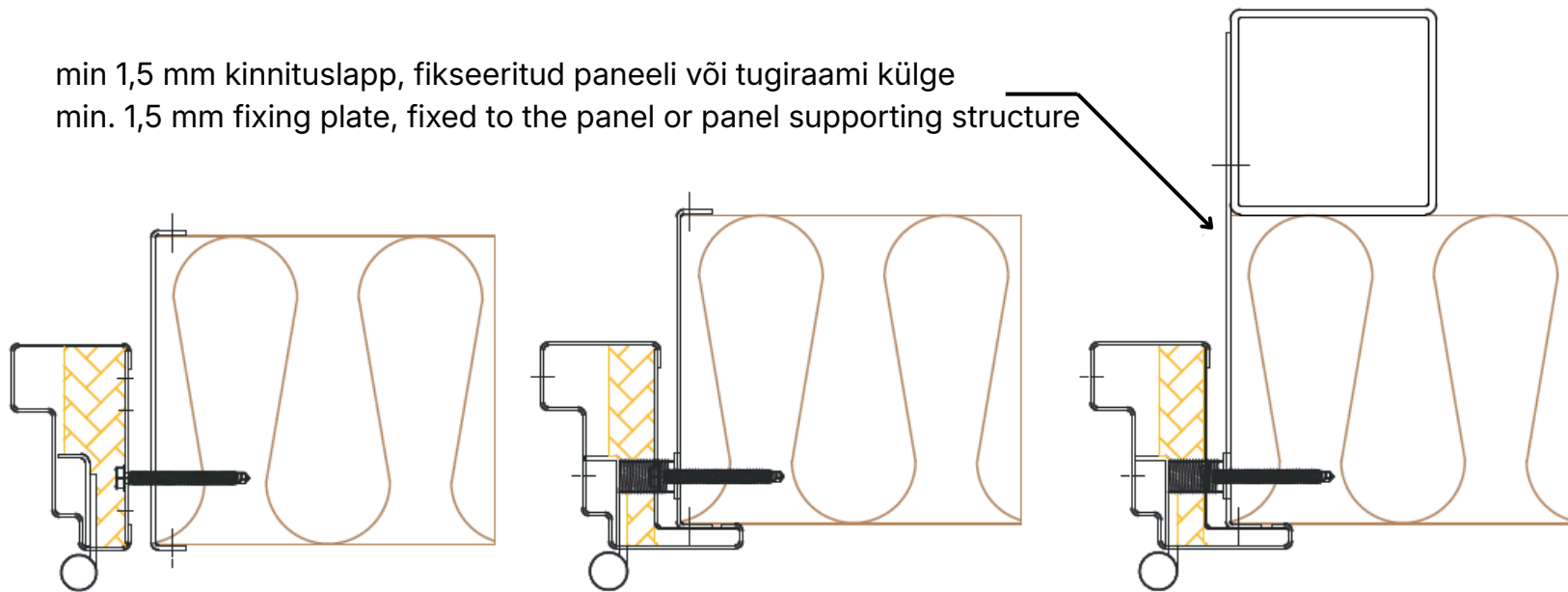
Joonis 2. Standardne kinnituspunkt kahe kinnitusega (Hülsiga või ilma) / Figure 2. Standard double-point fixing (with or without mounting sleeve)



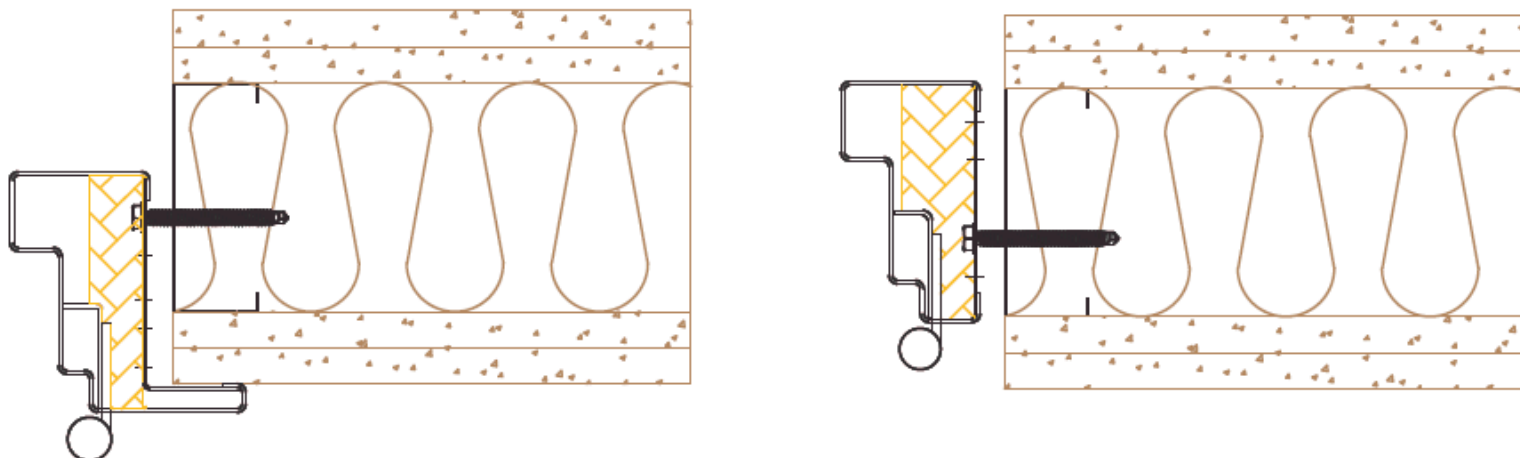
Joonis 3. Standardised luukide kinnitusviisid / Figure 3. Standard hatch fixings

min 1,5 mm kinnituslapp, fikseeritud paneeli või tugiraami külge

min. 1,5 mm fixing plate, fixed to the panel or panel supporting structure



Joonis 4. Standardne kinnitusviis paneelseina / Figure 4. Standard fixings to panel walls



Joonis 5. Standardne kinnitusviis kipsseina / Figure 5. Standard fixings to flexible construction walls

LEGOLENG/LEGO FRAME

Lengiosad kinnitatakse omavahel 4,2 × 25 mm isepuuriv kruvi (Torx-otsaga).

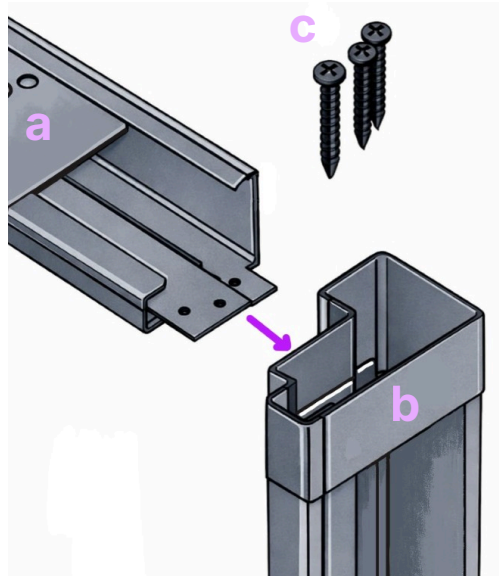
The frame parts are fastened together with 4,2 × 25 mm self-drilling screws (Torx head).

Legoleng koosneb:

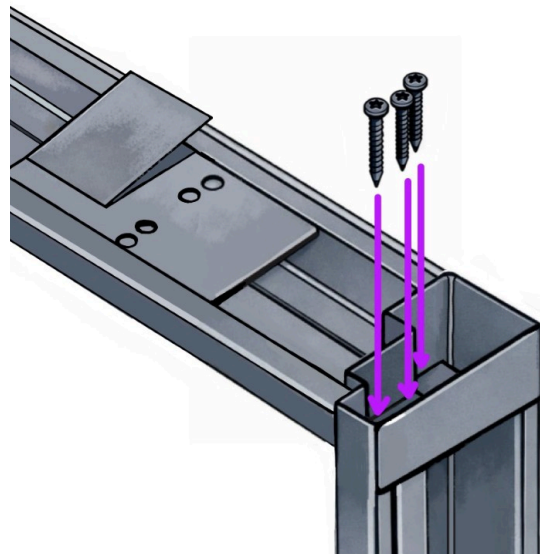
- a) üleleng,
- b) küljeleng,
- c) isepuuriv kruvi 4,2 × 25 mm,
- d) legolengi tugevdusnurk.

The Lego frame consists of:

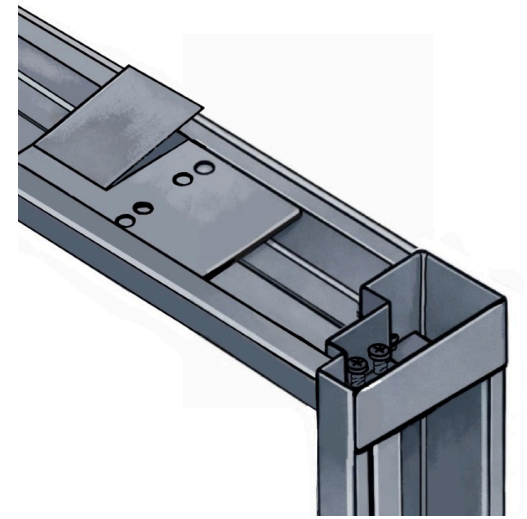
- a) head frame,
- b) side frame,
- c) 4.2 × 25 mm self-drilling screw, and
- d) Lego frame reinforcement bracket.



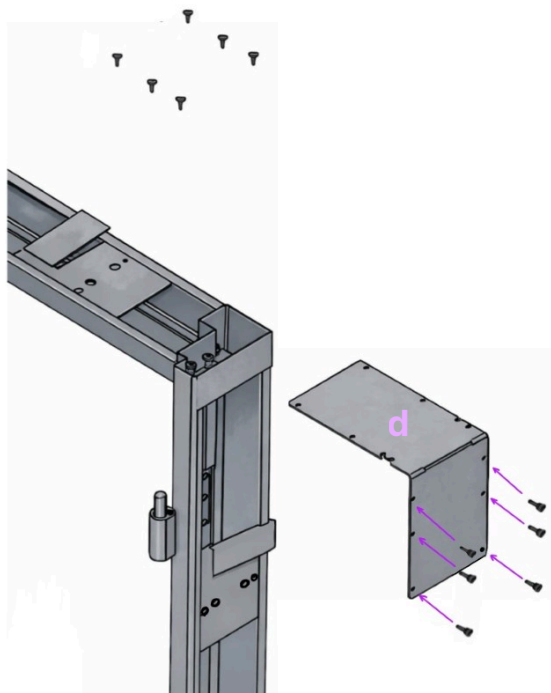
1



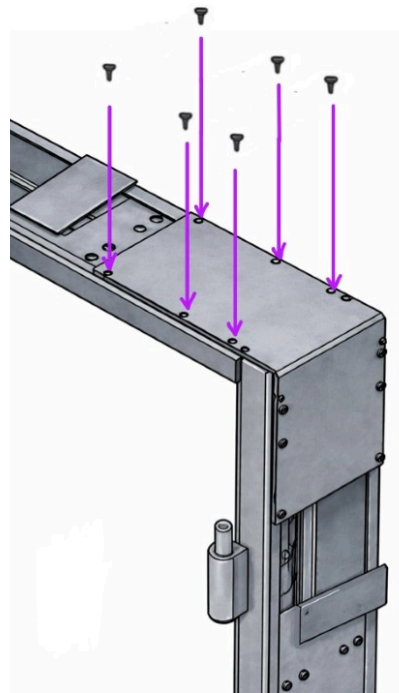
2



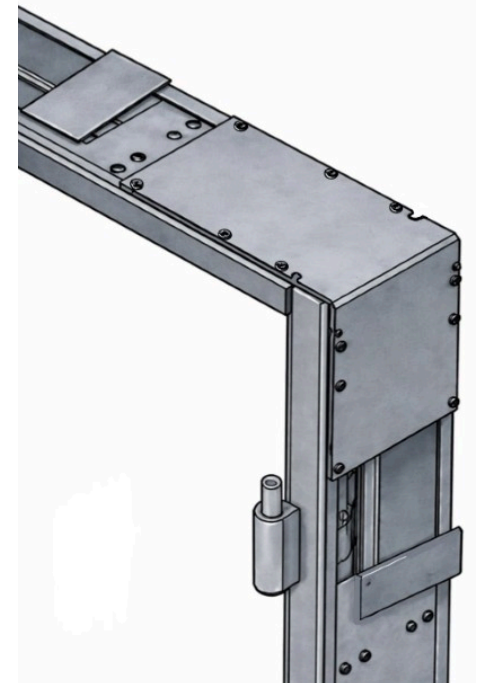
3



4



5



6

ABILENGI PAIGALDAMINE/AUXILIARY FRAME INSTALLATION

1. Painuta lengi kinnitusdetail lengist 5-10mm eemale.
2. Paigaldada abileng lengi ja painutatud lengi kinnitusdetaili vahele.
3. Kinnitada isekeermestava kruviga

1. Bend the frame fixing bracket away from the frame by 5–10 mm.
2. Place the spacer (auxiliary jamb) between the frame and the bent fixing bracket.
3. Secure with a self-tapping screw.

