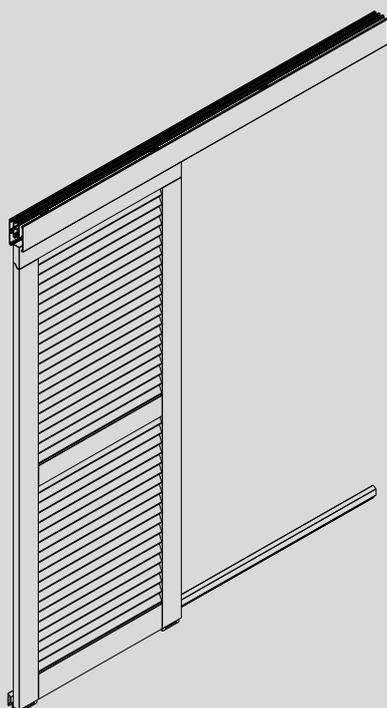


## HAWA-Frontslide 60/A HAWA-Frontslide 100/A HAWA-Frontslide 140/A



### **Planungs- und Montageanleitung**

Beschlag zum Schieben von Holz-, Metall- oder Leichtmetall-Schiebeläden bis 60 kg, 100 kg und 140 kg

### **Planification et instructions de montage**

Ferrure pour le coulissement de volets coulissants en bois, en métal ou en métal léger, pesant respectivement jusqu'à 60 kg, 100 kg et 140 kg

### **Planning and installation instructions**

Hardware for sliding shutters made of wood, metal or aluminium weighing up to 60 kg (132 lbs.), 100 kg (220 lbs.) and 140 kg (308 lbs.)

### **Progetto e istruzioni di montaggio**

Ferramenta per scorrimento di scuri scorrevoli in legno, metallo o alluminio fino a 60 kg, 100 kg e 140 kg ognuno

### **Planificación y instrucciones de montaje**

Herraje para postigos deslizantes de madera, metal y metal ligero de hasta 60 kg, 100 kg y 140 kg

Patente  
Brevets  
Patents  
Brevetti  
Patentes

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# 1 Inhaltsverzeichnis

Inhalt	Seite
<b>1 Inhaltsverzeichnis</b>	<b>2</b>
<b>2 Produktinformation</b>	<b>3</b>
<b>3 Abkürzungen, Symbole</b>	<b>12</b>
<b>4 Übersichten</b>	
4.1 Übersicht: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A und HAWA-Frontslide 140/A	<b>13</b>
4.2 Übersicht: Positionsnummern	<b>14</b>
<b>5 Planung</b>	
5.1 Planung: HAWA-Frontslide 60/A	<b>15</b>
5.2 Planung: HAWA-Frontslide 60/A	<b>16</b>
5.3 Planung: Winkeltragprofil zu HAWA-Frontslide 60/A	<b>17</b>
5.4 Planung: Winkeltragprofil mit Distanzprofil zu HAWA-Frontslide 60/A	<b>18</b>
5.5 Planung: Niedere Laufschiene zu HAWA-Frontslide 60/A	<b>19</b>
5.6 Planung: HAWA-Frontslide 100/A	<b>20</b>
5.7 Planung: Niedere Laufschiene zu HAWA-Frontslide 100/A	<b>21</b>
5.8 Planung: HAWA-Frontslide 140/A	<b>22</b>
5.9 Planung: Führungssituationen	<b>23</b>
<b>6 Berechnung</b>	
6.1 Berechnung: Schiebeladenbreite, Laufschiene und Führungsschiene	<b>24</b>
6.2 Berechnung: Aufhängepunkte	<b>25</b>
6.3 Berechnung: Bohrungen Schiebeladen	<b>26</b>
6.4 Berechnung: Bohrungen untere Schiebeladenführung	<b>27</b>
<b>7 Vormontage</b>	
7.1 Vormontage: Schiebeladen	<b>28</b>
<b>8 Montage</b>	
8.1 Montage: Laufschiene	<b>30</b>
8.2 Montage: Führungsschiene	<b>31</b>
8.3 Montage: Schiebeladen	<b>32</b>
8.4 Montage: Schienenpuffer	<b>34</b>
8.5 Montage: Verblendung	<b>35</b>
<b>9 Optionales</b>	
9.1 Optionales: Schliess- und Arretiermöglichkeiten HAWA-Frontslide 60/A	<b>36</b>
9.2 Optionales: Montage mit bauseitiger Hammerkopfschraube Typ 28/15	<b>37</b>
9.3 Optionales: Abdeckkappe	<b>38</b>
9.4 Optionales: Verbindungsstifte	<b>38</b>

## 2 Produktinformation

### Bestimmungsgemässe Verwendung

Der HAWA-Frontslide 60/A, HAWA-Frontslide 100/A und HAWA-Frontslide 140/A dient ausschliesslich als Sicht- und Sonnenschutz.

### Bestimmungsgemässer Verwendungsort

Aussenbereich mit ländlichem Binnenlandklima, ohne speziell hohe Belastung durch Umweltverschmutzung und min. 20 km vom Meer entfernt.

### Technische Daten

#### HAWA-Frontslide 60/A

Max. Gewicht pro Schiebeladen	60 kg
Min. Schiebeladenbreite	400 mm
Max. Schiebeladenhöhe	3200 mm
Schiebeladendicke	28–45 mm

#### HAWA-Frontslide 100/A

Max. Gewicht pro Schiebeladen	100 kg
Min. Schiebeladenbreite	500 mm
Max. Schiebeladenhöhe	3200 mm
Schiebeladendicke	28–50 mm

#### HAWA-Frontslide 140/A

Max. Gewicht pro Schiebeladen	140 kg
Min. Schiebeladenbreite	700 mm
Max. Schiebeladenhöhe	3200 mm
Schiebeladendicke	28–60 mm

Zertifikate sind unter [www.hawa.ch](http://www.hawa.ch) abrufbar.

### Artikelnummer

Artikel werden mit einer 5-stelligen Nummer bezeichnet.

### Allgemeine Hinweise

Die Montage wird am Beispiel des HAWA-Frontslide 60/A gezeigt. Abweichende Arbeitsschritte für HAWA-Frontslide 100/A und HAWA-Frontslide 140/A sind entsprechend gekennzeichnet.

Das Dokument «Sicherheitshinweise» (22991) ist integraler Bestandteil dieser Planungs- und Montageanleitung.

Führen Sie nach Abschluss der Montage eine Funktionskontrolle durch.

Nach der Funktionskontrolle ist dem Endnutzer die Anleitung, sowie das Dokument «Sicherheitshinweise» (22991) zu übergeben.

Es gelten metrische Abmessungen – Zollangaben sind nur zur Information.

Anleitungen aufbewahren, Ersatz unter [www.hawa.ch](http://www.hawa.ch).

### Risiko- und Restrisiko

Vom Beschlag geht kein Risiko- oder Restrisiko aus.

### Entsorgung

Die Werkstoffe, Zubehör und Verpackung sollen einer umweltgerechten Wiederverwertung zugeführt werden.

# 1 Sommaire

Contenu		Page
<b>1</b>	<b>Sommaire</b>	<b>4</b>
<b>2</b>	<b>Informations sur les produits</b>	<b>5</b>
<b>3</b>	<b>Abréviations, symboles</b>	<b>12</b>
<b>4</b>	<b>Aperçus généraux</b>	
	4.1 Aperçu général: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A et HAWA-Frontslide 140/A	<b>13</b>
	4.2 Aperçu général: numéros de position	<b>14</b>
<b>5</b>	<b>Planification</b>	
	5.1 Planification: HAWA-Frontslide 60/A	<b>15</b>
	5.2 Planification: HAWA-Frontslide 60/A	<b>16</b>
	5.3 Planification: profil porteur en équerre pour système HAWA-Frontslide 60/A	<b>17</b>
	5.4 Planification: profil porteur en équerre avec profil d'écartement pour système HAWA-Frontslide 60/A	<b>18</b>
	5.5 Planification: Rail de roulement de faible hauteur pour HAWA-Frontslide 60/A	<b>19</b>
	5.6 Planification: HAWA-Frontslide 100/A	<b>20</b>
	5.7 Planification: Rail de roulement de faible hauteur pour HAWA-Frontslide 100/A	<b>21</b>
	5.8 Planification: HAWA-Frontslide 140/A	<b>22</b>
	5.9 Planification: situations de guidage	<b>23</b>
<b>6</b>	<b>Calcul</b>	
	6.1 Calcul: largeur du volet coulissant, rail de roulement et rail de guidage	<b>24</b>
	6.2 Calcul: points de suspension	<b>25</b>
	6.3 Calcul: perçages du volet coulissant	<b>26</b>
	6.4 Calcul: perçages du guide inférieur du volet coulissant	<b>27</b>
<b>7</b>	<b>Prémontage</b>	
	7.1 Prémontage: volet coulissant	<b>28</b>
<b>8</b>	<b>Montage</b>	
	8.1 Montage: rail de roulement	<b>30</b>
	8.2 Montage: rail de guidage	<b>31</b>
	8.3 Montage: volet coulissant	<b>32</b>
	8.4 Montage: butée de rail	<b>34</b>
	8.5 Montage: cache	<b>35</b>
<b>9</b>	<b>En option</b>	
	9.1 En option: possibilités de fermeture et de blocage HAWA-Frontslide 60/A	<b>36</b>
	9.2 En option: montage avec vis à tête rectangulaire avec angles abattus de type 28/15 du client	<b>37</b>
	9.3 En option: cache de recouvrement	<b>38</b>
	9.4 En option: goujons de raccordement	<b>38</b>

## 2 Informations sur les produits

### Utilisation conforme aux dispositions

Les systèmes HAWA-Frontslide 60/A, HAWA-Frontslide 100/A et HAWA-Frontslide 140/A servent exclusivement de protection contre la vue et le soleil.

### Lieu d'utilisation conforme aux dispositions

Espaces extérieurs exposés à un climat continental de région non côtière, non soumis à des sollicitations particulièrement fortes en matière de pollution environnementale et situés à une distance d'au moins 20 km de la mer.

### Données techniques

#### HAWA-Frontslide 60/A

Poids max. par volet coulissant	60 kg
Largeur min. de volet coulissant	400 mm
Hauteur max. de volet coulissant	3200 mm
Épaisseur de volet coulissant	28–45 mm

#### HAWA-Frontslide 100/A

Poids max. par volet coulissant	100 kg
Largeur min. de volet coulissant	500 mm
Hauteur max. de volet coulissant	3200 mm
Épaisseur de volet coulissant	28–50 mm

#### HAWA-Frontslide 140/A

Poids max. par volet coulissant	140 kg
Largeur min. de volet coulissant	700 mm
Hauteur max. de volet coulissant	3200 mm
Épaisseur de volet coulissant	28–60 mm

Certificats consultables sur le site Internet [www.hawa.ch](http://www.hawa.ch).

### Numéros d'articles

Les articles sont désignés par un numéro à 5 chiffres.

### Indications d'ordre général

Le montage est décrit à partir de l'exemple du système HAWA-Frontslide 60/A. Les étapes de travail spécifiques aux systèmes HAWA-Frontslide 100/A et HAWA-Frontslide 140/A sont repérées en conséquence.

Le document « Consignes de sécurité » (22991) fait partie intégrante de ces instructions de planification et de montage. Une fois le montage effectué, procéder à un contrôle de fonctionnement. Après ce contrôle de fonctionnement, les instructions de planification et de montage, ainsi que le document « Consignes de sécurité » (22991) doivent être remis à l'utilisateur final.

Les dimensions applicables sont métriques – les dimensions en pouces ne sont fournies qu'à titre informatif.

Conserver ces instructions ; en cas de perte, il est possible d'en obtenir un nouvel exemplaire sur le site Internet [www.hawa.ch](http://www.hawa.ch).

### Risques et risques résiduels

Cette ferrure n'occasionne aucun risque, ni aucun risque résiduel.

### Élimination

Les matériaux, les accessoires et les emballages doivent être soumis à un recyclage conforme aux impératifs écologiques.

# 1 Table of contents

Contents		Page
<b>1</b>	<b>Table of contents</b>	<b>6</b>
<b>2</b>	<b>Product information</b>	<b>7</b>
<b>3</b>	<b>Abbreviations, symbols</b>	<b>12</b>
<b>4</b>	<b>Overviews</b>	
	4.1 Overview: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A and HAWA-Frontslide 140/A	<b>13</b>
	4.2 Overview: position numbers	<b>14</b>
<b>5</b>	<b>Planning</b>	
	5.1 Planning: HAWA-Frontslide 60/A	<b>15</b>
	5.2 Planning: HAWA-Frontslide 60/A	<b>16</b>
	5.3 Planning: Angled profile support for HAWA-Frontslide 60/A	<b>17</b>
	5.4 Planning: Angled profile support with spacer profile for HAWA-Frontslide 60/A	<b>18</b>
	5.5 Planning: Lower top track for HAWA-Frontslide 60/A	<b>19</b>
	5.6 Planning: HAWA-Frontslide 100/A	<b>20</b>
	5.7 Planning: Lower top track for HAWA-Frontslide 100/A	<b>21</b>
	5.8 Planning: HAWA-Frontslide 140/A	<b>22</b>
	5.9 Planning: Guide situations	<b>23</b>
<b>6</b>	<b>Calculation</b>	
	6.1 Calculation: Sliding shutter width, top track and bottom guide channel	<b>24</b>
	6.2 Calculation: Suspension points	<b>25</b>
	6.3 Calculation: Drill holes, sliding shutter	<b>26</b>
	6.4 Calculation: Drill holes, bottom sliding shutter guide	<b>27</b>
<b>7</b>	<b>Pre-assembly</b>	
	7.1 Pre-assembly: Sliding shutter	<b>28</b>
<b>8</b>	<b>Assembly</b>	
	8.1 Assembly: Top track	<b>30</b>
	8.2 Assembly: Bottom guide channel	<b>31</b>
	8.3 Assembly: Sliding shutter	<b>32</b>
	8.4 Assembly: track stop	<b>34</b>
	8.5 Assembly: Cover	<b>35</b>
<b>9</b>	<b>Optional</b>	
	9.1 Optional: Locking and securing options HAWA-Frontslide 60/A	<b>36</b>
	9.2 Optional: Assembly using hammer head bolts type 28/15 provided by the customer	<b>37</b>
	9.3 Optional: Cover cap	<b>38</b>
	9.4 Optional: Connecting pins	<b>38</b>

## 2 Product information

### Intended use

The HAWA-Frontslide 60/A, HAWA-Frontslide 100/A or HAWA-Frontslide 140/A serves exclusively as a privacy screen and sun protection.

### Intended place of use

External area with a rural inland climate, no particularly high pollution burden and at least 20 km (12.4 mi) away from the sea.

### Technical data

#### HAWA-Frontslide 60/A

Max. weight per sliding shutter	60 kg (132 lbs.)
Min. sliding shutter width	400 mm (1'3 $\frac{3}{4}$ " )
Max. sliding shutter height	3200 mm (10'6")
Sliding shutter thickness	28–45 mm (1 $\frac{1}{8}$ " -1 $\frac{25}{32}$ " )

#### HAWA-Frontslide 100/A

Max. weight per sliding shutter	100 kg (220 lbs.)
Min. sliding shutter width	500 mm (1'7 $\frac{11}{16}$ " )
Max. sliding shutter height	3200 mm (10'6")
Sliding shutter thickness	28–50 mm (1 $\frac{1}{8}$ " -1 $\frac{31}{32}$ " )

#### HAWA-Frontslide 140/A

Max. weight per sliding shutter	140 kg (308 lbs.)
Min. sliding shutter width	700 mm (2'3 $\frac{9}{16}$ " )
Max. sliding shutter height	3200 mm (10'6")
Sliding shutter thickness	28–60 mm (1 $\frac{1}{8}$ " -2 $\frac{3}{8}$ " )

Certificates are available for downloading at [www.hawa.ch](http://www.hawa.ch)

### Article number

Articles are identified by a 5-digit number.

### General notes

Installation is illustrated using a HAWA-Frontslide 60/A as an example. Deviating work steps for HAWA-Frontslide 100/A and HAWA-Frontslide 140/A are indicated accordingly.

The document "Safety Notes" (22991) is an integral component of these planning and installation instructions. Carry out a function check when installation is complete. Hand over the instructions and the "Safety Notes" document (22991) to the end user after the function check.

Metric measurements apply – those in inches are for information only.

Retain the instructions. Replacements available from [www.hawa.ch](http://www.hawa.ch).

### Risk and residual risk

The hardware does not pose a risk or residual risk.

### Disposal

Materials, accessories and packaging should be recycled in an environmentally friendly manner.

# 1 Indice

Indice		Pagina
<b>1</b>	<b>Indice</b>	<b>8</b>
<b>2</b>	<b>Informazioni sul prodotto</b>	<b>9</b>
<b>3</b>	<b>Abbreviazioni, simboli</b>	<b>12</b>
<b>4</b>	<b>Panoramiche</b>	
	4.1 Panoramica: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A e HAWA-Frontslide 140/A	<b>13</b>
	4.2 Panoramica: numeri posizione	<b>14</b>
<b>5</b>	<b>Progetto</b>	
	5.1 Progetto: HAWA-Frontslide 60/A	<b>15</b>
	5.2 Progetto: HAWA-Frontslide 60/A	<b>16</b>
	5.3 Progetto: profilo portante angolare per HAWA-Frontslide 60/A	<b>17</b>
	5.4 Progetto: profilo portante angolare con distanziale profilato per HAWA-Frontslide 60/A	<b>18</b>
	5.5 Progetto: Binario inferiore per HAWA-Frontslide 60/A	<b>19</b>
	5.6 Progetto: HAWA-Frontslide 100/A	<b>20</b>
	5.7 Progetto: Binario inferiore per HAWA-Frontslide 100/A	<b>21</b>
	5.8 Progetto: HAWA-Frontslide 140/A	<b>22</b>
	5.9 Progetto: situazioni di guida	<b>23</b>
<b>6</b>	<b>Calcoli</b>	
	6.1 Calcolo: larghezza scuro scorrevole, binario e guida	<b>24</b>
	6.2 Calcolo: punti di sospensione	<b>25</b>
	6.3 Calcolo: fori scuro scorrevole	<b>26</b>
	6.4 Calcolo: fori guida inferiore scuro scorrevole	<b>27</b>
<b>7</b>	<b>Premontaggio</b>	
	7.1 Premontaggio: scuro scorrevole	<b>28</b>
<b>8</b>	<b>Montaggio</b>	
	8.1 Montaggio: binario	<b>30</b>
	8.2 Montaggio: guida	<b>31</b>
	8.3 Montaggio: scuro scorrevole	<b>32</b>
	8.4 Montaggio: paracolpi per binario	<b>34</b>
	8.5 Montaggio: rivestimento	<b>35</b>
<b>9</b>	<b>Opzioni</b>	
	9.1 Opzioni: Possibilità di chiusura e arresto HAWA-Frontslide 60/A	<b>36</b>
	9.2 Opzioni: montaggio mediante vite con testa a martello tipo 28/15 da parte del committente	<b>37</b>
	9.3 Opzioni: copriforo	<b>38</b>
	9.4 Opzioni: spine di collegamento	<b>38</b>

## 2 Informazioni sul prodotto

### Uso conforme

HAWA-Frontslide 60/A, HAWA-Frontslide 100/A e HAWA-Frontslide 140/A servono esclusivamente come riparo dal sole e da sguardi indiscreti.

### Luogo previsto per l'utilizzo

Ambienti esterni caratterizzati da clima continentale e scarso inquinamento ambientale ad almeno 20 km dal mare.

### Dati tecnici

#### HAWA-Frontslide 60/A

Peso max per scuro	60 kg
Largh. scuro scorr. min	400 mm
Altezza scuro scorr. max.	3200 mm
Spessore scuro scorrevole	28–45 mm

#### HAWA-Frontslide 100/A

Peso max per scuro	100 kg
Largh. scuro scorr. min	500 mm
Altezza scuro scorr. max.	3200 mm
Spessore scuro scorrevole	28–50 mm

#### HAWA-Frontslide 140/A

Peso max per scuro	140 kg
Largh. scuro scorr. min	700 mm
Altezza scuro scorr. max.	3200 mm
Spessore scuro scorrevole	28–60 mm

I certificati sono reperibili su [www.hawa.ch](http://www.hawa.ch).

### Codice articoli

Gli articoli sono identificati da un numero a 5 cifre.

### Indicazioni generali

Il montaggio esemplificativo si basa su HAWA-Frontslide 60/A. I passi divergenti per HAWA-Frontslide 100/A e HAWA-Frontslide 140/A sono segnalati.

Il documento «Avvertenze di sicurezza (22991)» è parte integrante delle presenti Istruzioni di progetto e montaggio. Terminato il montaggio, controllare il funzionamento. Dopo il controllo del funzionamento occorre consegnare all'utente finale le istruzioni e il documento «Avvertenze di sicurezza (22991)».

Valgono le dimensioni metriche – dimensioni in pollici indicate solo a scopo informativo.

Custodire le istruzioni; per ulteriori esemplari scrivere a [www.hawa.ch](http://www.hawa.ch).

### Pericoli e rischi rimanenti

Questa ferramenta non causa pericoli né rischi rimanenti.

### Smaltimento

Ai fini della tutela ambientale, i materiali, gli accessori e gli imballaggi devono essere conferiti ad un centro per la raccolta differenziata dei rifiuti.

# 1 Índice

Contenido	Página
<b>1 Índice</b>	<b>10</b>
<b>2 Información sobre el producto</b>	<b>11</b>
<b>3 Abreviaturas, símbolos</b>	<b>12</b>
<b>4 Vistas de conjunto</b>	
4.1 Vista general: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A y HAWA-Frontslide 140/A	<b>13</b>
4.2 Vista general: Números de posición	<b>14</b>
<b>5 Planificación</b>	
5.1 Planificación: HAWA-Frontslide 60/A	<b>15</b>
5.2 Planificación: HAWA-Frontslide 60/A	<b>16</b>
5.3 Planificación: Perfil angular portante para HAWA-Frontslide 60/A	<b>17</b>
5.4 Planificación: Perfil angular portante con perfil distanciador para HAWA-Frontslide 60/A	<b>18</b>
5.5 Planificación: Riel de rodadura inferior para HAWA-Frontslide 60/A	<b>19</b>
5.6 Planificación: HAWA-Frontslide 100/A	<b>20</b>
5.7 Planificación: Riel de rodadura inferior para HAWA-Frontslide 100/A	<b>21</b>
5.8 Planificación: HAWA-Frontslide 140/A	<b>22</b>
5.9 Planificación: Tipos de montaje de la guía	<b>23</b>
<b>6 Cálculo</b>	
6.1 Cálculo: Ancho del postigo deslizante, riel de rodadura y riel de guía	<b>24</b>
6.2 Cálculo: Puntos de suspensión	<b>25</b>
6.3 Cálculo: Orificios postigo deslizante	<b>26</b>
6.4 Cálculo: Orificios guía inferior postigo deslizante	<b>27</b>
<b>7 Montaje previo</b>	
7.1 Montaje previo: Postigo deslizante	<b>28</b>
<b>8 Montaje</b>	
8.1 Montaje: Riel de rodadura	<b>30</b>
8.2 Montaje: Riel guía	<b>31</b>
8.3 Montaje: Postigo deslizante	<b>32</b>
8.4 Montaje: tope de riel	<b>34</b>
8.5 Montaje: Cobertura	<b>35</b>
<b>9 Opcional</b>	
9.1 Opcional: Opciones de cierre y detención HAWA-Frontslide 60/A	<b>36</b>
9.2 Opcional: Montaje con tornillo con cabeza de martillo en obra 28/15 suministrado por el cliente	<b>37</b>
9.3 Opcional: Tapa	<b>38</b>
9.4 Opcional: Pasadores de unión	<b>38</b>

## 2 Información sobre el producto

### Uso reglamentario

HAWA-Frontslide 60/A, HAWA-Frontslide 100/A o HAWA-Frontslide 140/A sirve únicamente como protección visual y solar.

### Lugar de instalación reglamentario

Espacio exterior con clima de zona interior, sin alta contaminación ambiental y, como mínimo, a 20 km del mar.

### Datos técnicos

#### HAWA-Frontslide 60/A

Peso máximo por postigo deslizando	60 kg
Ancho mínimo del postigo deslizando	400 mm
Altura máxima del postigo deslizando	3200 mm
Espesor del postigo deslizando	28–45 mm

#### HAWA-Frontslide 100/A

Peso máximo por postigo deslizando	100 kg
Ancho mínimo del postigo deslizando	500 mm
Altura máxima del postigo deslizando	3200 mm
Espesor del postigo deslizando	28–50 mm

#### HAWA-Frontslide 140/A

Peso máximo por postigo deslizando	140 kg
Ancho mínimo del postigo deslizando	700 mm
Altura máxima del postigo deslizando	3200 mm
Espesor del postigo deslizando	28–60 mm

Certificados disponibles en [www.hawa.ch](http://www.hawa.ch).

### Nº de artículo

Los artículos están numerados con un código de 5 dígitos.

### Instrucciones generales

Para este ejemplo se ha utilizado el montaje de HAWA-Frontslide 60/A. Los pasos diferentes para HAWA-Frontslide 100/A y HAWA-Frontslide 140/A están indicados.

El documento «Advertencias de seguridad» (22991) forma parte de este manual de instrucciones. Una vez finalizado el montaje, deberá comprobarse el funcionamiento. Tras la comprobación del funcionamiento, deberán entregarse al usuario final las instrucciones y el documento "Advertencias de seguridad" (22991).

Las dimensiones están indicadas en el sistema métrico en mm. Las dimensiones facilitadas en pulgadas son simplemente a título informativo.

Conserve bien el manual de instrucciones. Si lo perdiera, encontrará una copia en [www.hawa.ch](http://www.hawa.ch).

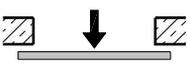
### Riesgos y peligros

El herraje no genera ninguna situación de peligro ni de otro riesgo.

### Eliminación de residuos

Reciclar adecuadamente los materiales, accesorios y embalajes utilizados.

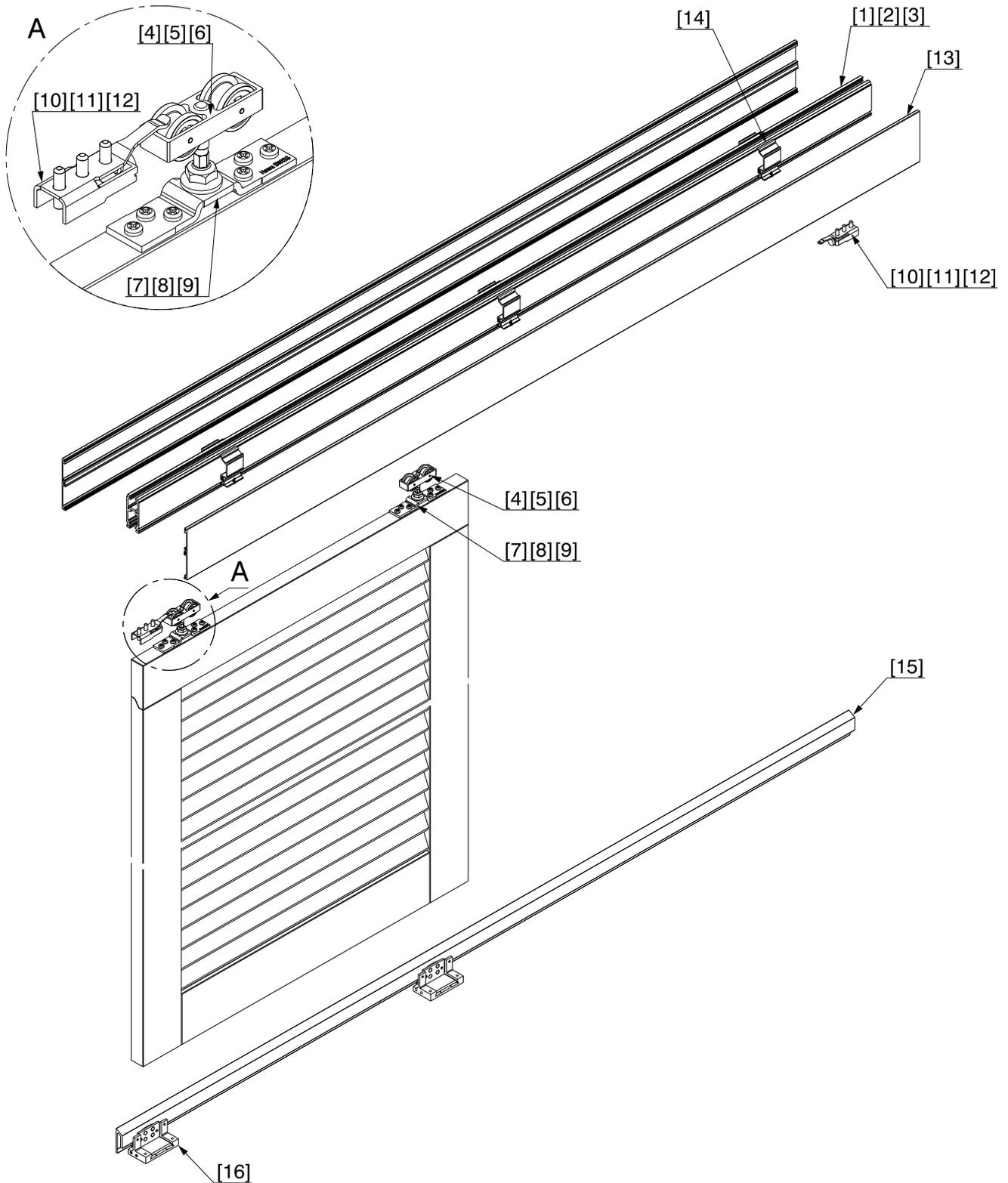
### 3 Abkürzungen, Symbole / Abréviations, symboles / Abbreviations, symbols / Abbreviazioni, simboli / Abreviaturas, símbolos

AB	<b>DE</b> Anlagebreite / <b>FR</b> Largeur d'installation / <b>EN</b> Installation width / <b>IT</b> Larghezza sistema / <b>ES</b> Ancho de la instalación
FS	<b>DE</b> Führungsschiene / <b>FR</b> Rail de guidage / <b>EN</b> Bottom guide channel / <b>IT</b> Guida / <b>ES</b> Riel guía
LMB	<b>DE</b> Lichtmassbreite / <b>FR</b> Largeur intérieure / <b>EN</b> Inside width / <b>IT</b> Larghezza quota luce / <b>ES</b> Ancho interior
LS	<b>DE</b> Laufschiene / <b>FR</b> Rail de roulement / <b>EN</b> Top track / <b>IT</b> Binario / <b>ES</b> Riel de rodadura
M	<b>DE</b> Konstruktionsmasse / <b>FR</b> Dimensions de la structure / <b>EN</b> Design dimension / <b>IT</b> Quote costruttive / <b>ES</b> Medidas de construcción
P	<b>DE</b> Schiebeladenüberschneidung / <b>FR</b> Chevauchement des volets coulissants / <b>EN</b> Sliding shutter overlap / <b>IT</b> Intersezione scuro scorrevole / <b>ES</b> Solapadura de postigos deslizantes
SLB	<b>DE</b> Schiebeladenbreite / <b>FR</b> Largeur de volet coulissant / <b>EN</b> Sliding shutter width / <b>IT</b> Larghezza scuro scorrevole / <b>ES</b> Ancho del postigo deslizante
	<b>DE</b> Draufsicht / <b>FR</b> Vue de dessus / <b>EN</b> Top view / <b>IT</b> Pianta / <b>ES</b> Vista en planta
	<b>DE</b> Seitenansicht / <b>FR</b> Vue de côté/ <b>EN</b> Side view / <b>IT</b> Fianco / <b>ES</b> Vista lateral
	<b>DE</b> Vorderansicht / <b>FR</b> Vue de face / <b>EN</b> Front view/ <b>IT</b> Prospetto / <b>ES</b> Vista frontal
	<b>DE</b> Ansichtsseite / <b>FR</b> Vue en projection / <b>EN</b> View side / <b>IT</b> vista in proiezione / <b>ES</b> cara vista
	<b>DE</b> Detail / <b>FR</b> Détail / <b>EN</b> Detail / <b>IT</b> Dettaglio / <b>ES</b> Detalle
	<b>DE</b> Werkzeugnummer, Werkzeugart / <b>FR</b> Numéro d'outil, type d'outil / <b>EN</b> Tool number, tool type / <b>IT</b> Numero utensile, tipo utensile / <b>ES</b> Número de herramienta, tipo de herramienta
	<b>DE</b> Farblos eloxiert / <b>FR</b> Anodisé couleur argent / <b>EN</b> Plain anodized / <b>IT</b> Anodizzato incolore / <b>ES</b> Anodizado plata
	<b>DE</b> Uneloxiert / <b>FR</b> Non anodisé / <b>EN</b> Non-anodized / <b>IT</b> Non anodizzato / <b>ES</b> Sin anodizar
	<b>DE</b> Hawa Teile / <b>FR</b> Pièces Hawa / <b>EN</b> Hawa parts / <b>IT</b> Componenti Hawa / <b>ES</b> Componentes Hawa
	<b>DE</b> Praxisbezogene Informationen und Tipps / <b>FR</b> Informations et astuces pratiques / <b>EN</b> Practical information and tips / <b>IT</b> Indicazioni pratiche e suggerimenti / <b>ES</b> Información práctica y consejos

## 4 Übersichten / Aperçus généraux / Overviews / Panoramiche / Vistas de conjunto

### 4.1

DE	<b>Übersicht: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A und HAWA-Frontslide 140/A</b>
FR	<b>Aperçu général: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A et HAWA-Frontslide 140/A</b>
EN	<b>Overview: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A and HAWA-Frontslide 140/A</b>
IT	<b>Panoramica: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A e HAWA-Frontslide 140/A</b>
ES	<b>Vista general: HAWA-Frontslide 60/A, HAWA-Frontslide 100/A y HAWA-Frontslide 140/A</b>



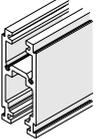
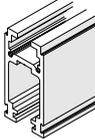
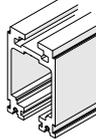
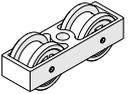
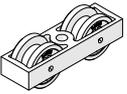
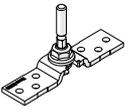
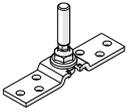
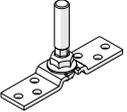
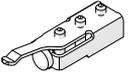
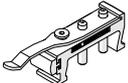
4.2

<b>DE</b>	<b>Übersicht: Positionsnummern</b>
<b>FR</b>	<b>Aperçu général: numéros de position</b>
<b>EN</b>	<b>Overview: position numbers</b>
<b>IT</b>	<b>Panoramica: numeri posizione</b>
<b>ES</b>	<b>Vista general: Números de posición</b>

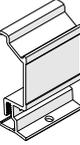
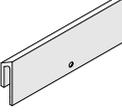
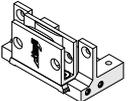
**HAWA-Frontslide 60/A**

**HAWA-Frontslide 100/A**

**HAWA-Frontslide 140/A**

<b>[1]</b>  24795 24796 24839	<b>[2]</b>  24797 24798 24840	<b>[3]</b>  24799 24800 24841
<b>[4]</b>  17119	<b>[5]</b>  24552	<b>[6]</b>  24554
<b>[7]</b>  24562	<b>[8]</b>  24564	<b>[9]</b>  24567
<b>[10]</b>  17027	<b>[11]</b>  24834	<b>[12]</b>  24835

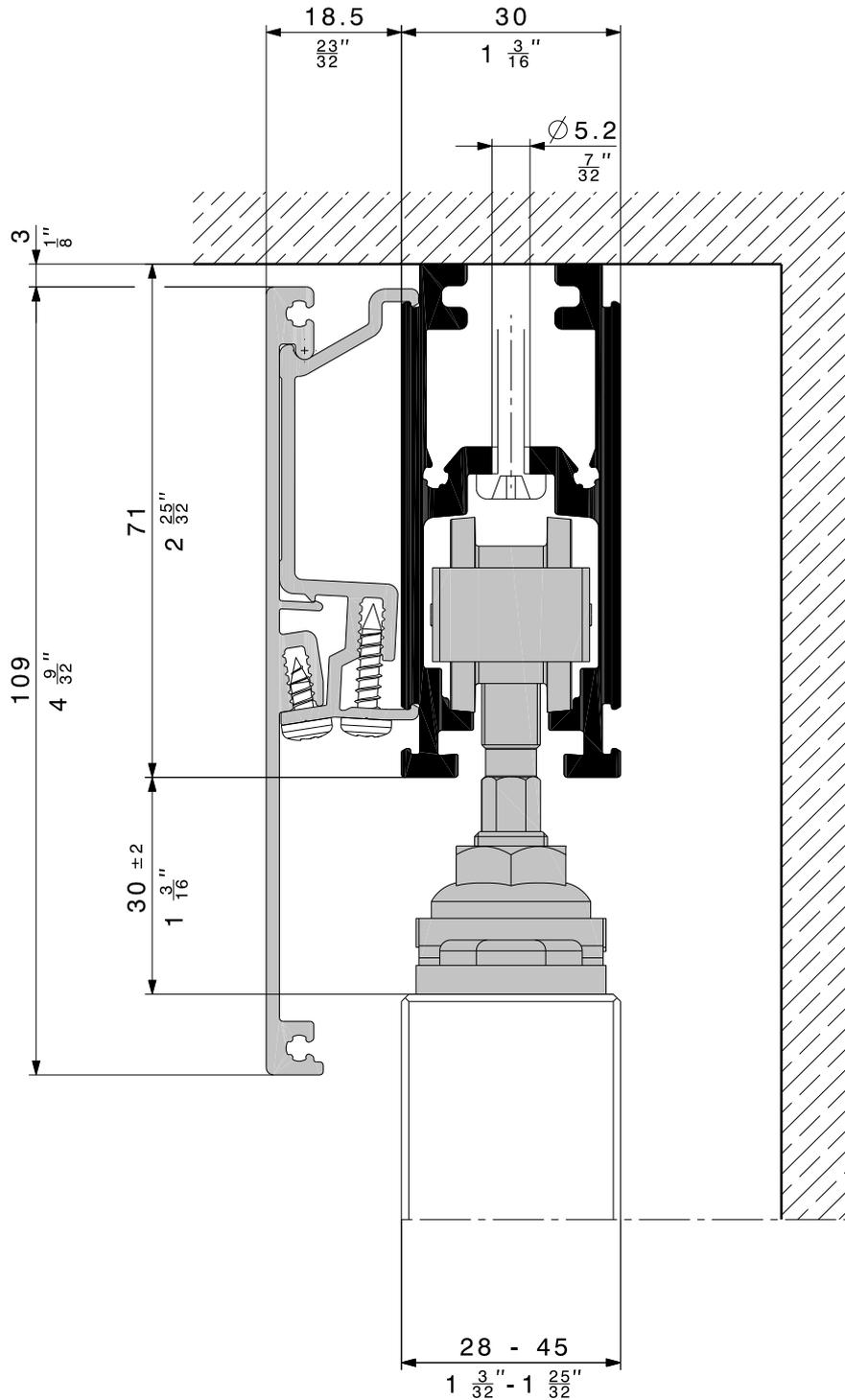
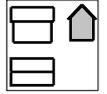
**HAWA-Frontslide 60/A**  
**HAWA-Frontslide 100/A**  
**HAWA-Frontslide 140/A**

<b>[13]</b>  24808 □ 24810 □ 24809 □ 24811 □ 24845 □	<b>[14]</b>  24767	<b>[15]</b>  24460 24462
<b>[16]</b>  24543 24544		

## 5 Planung / Planification / Planning / Progetto / Planificación

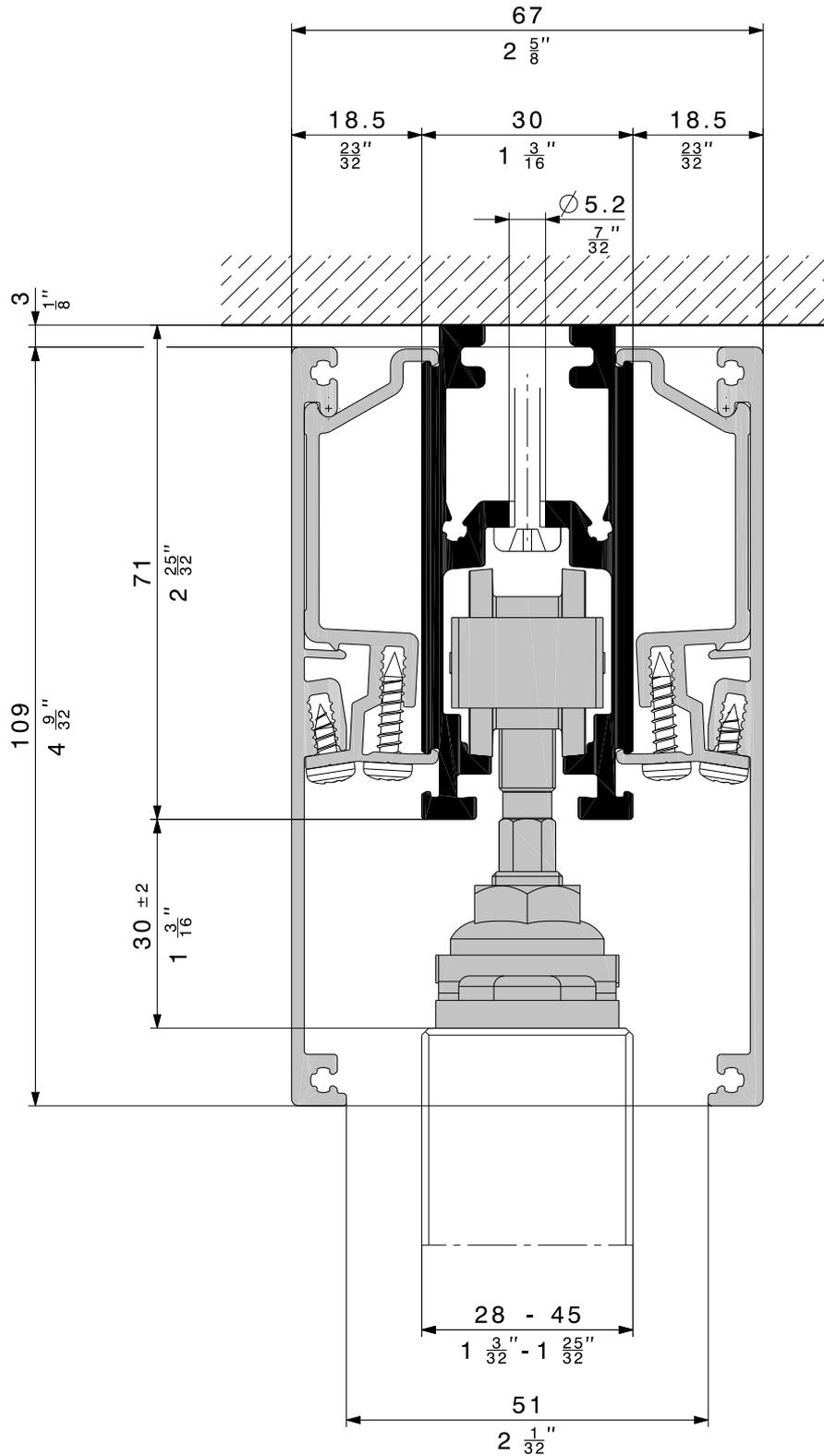
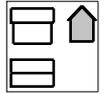
### 5.1

DE	Planung: HAWA-Frontslide 60/A
FR	Planification: HAWA-Frontslide 60/A
EN	Planning: HAWA-Frontslide 60/A
IT	Progetto: HAWA-Frontslide 60/A
ES	Planificación: HAWA-Frontslide 60/A



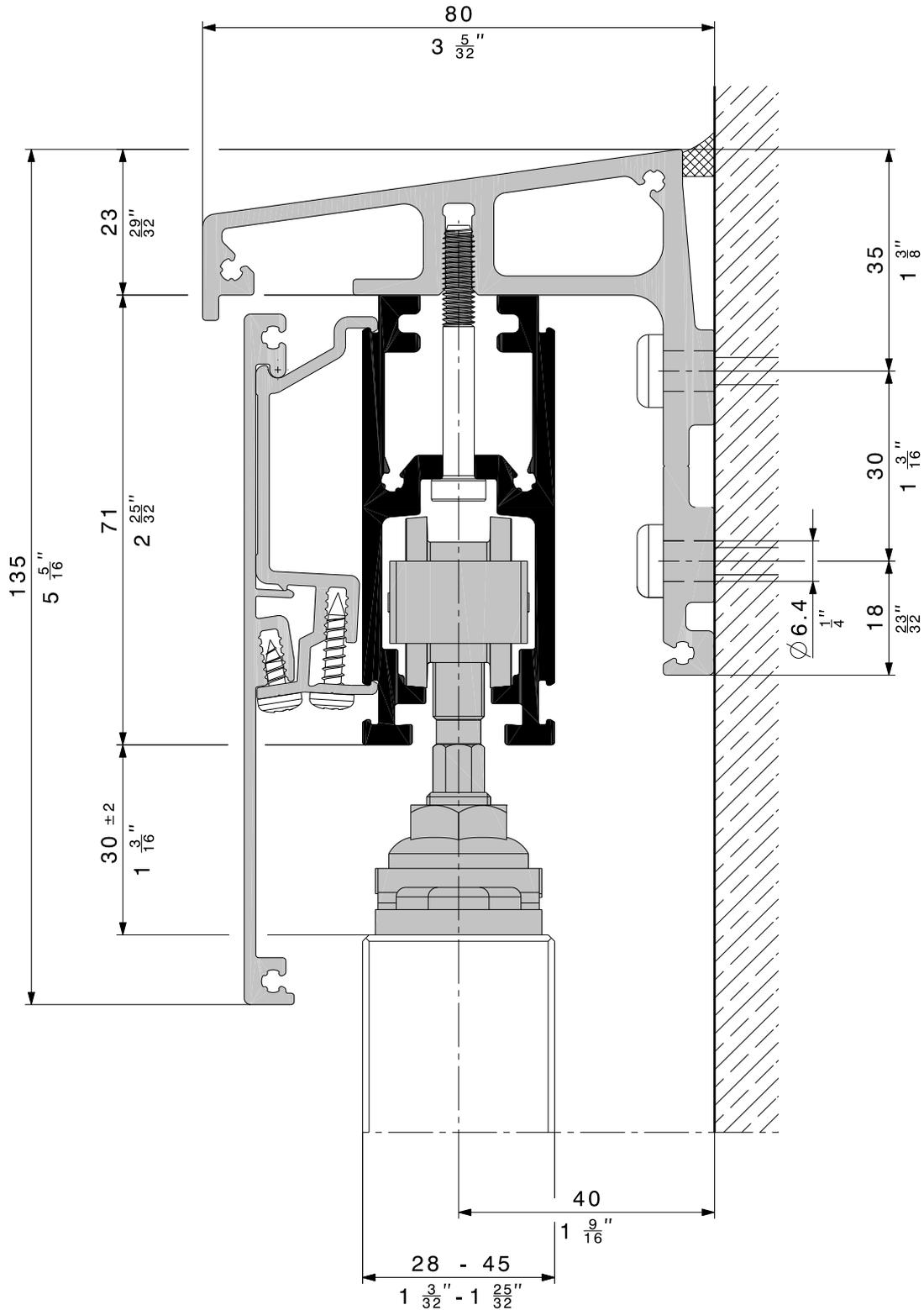
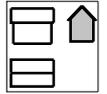
5.2

DE	Planung: HAWA-Frontslide 60/A
FR	Planification: HAWA-Frontslide 60/A
EN	Planning: HAWA-Frontslide 60/A
IT	Progetto: HAWA-Frontslide 60/A
ES	Planificación: HAWA-Frontslide 60/A



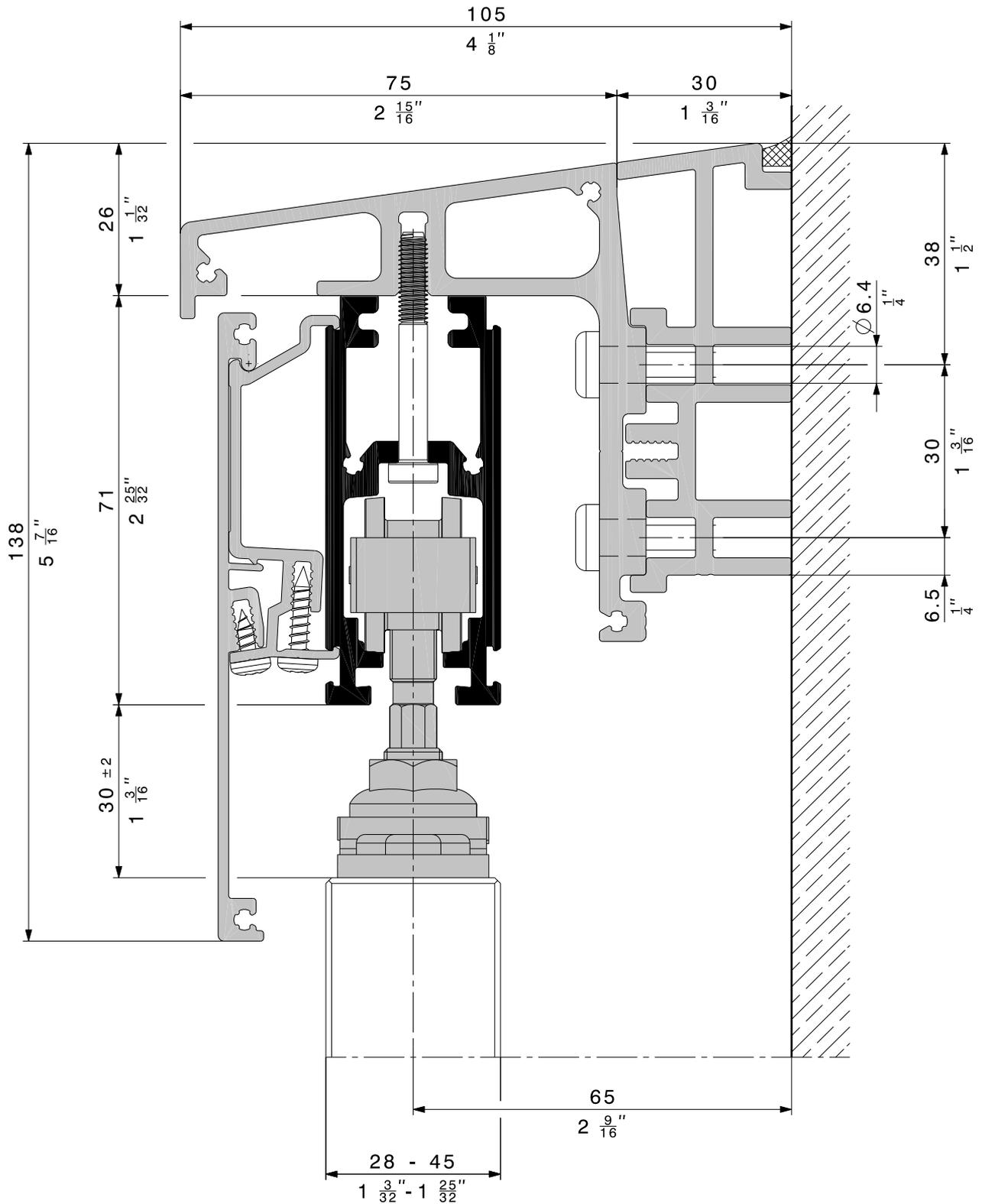
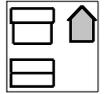
5.3

DE	Planung: Winkeltragprofil zu HAWA-Frontslide 60/A
FR	Planification: profil porteur en équerre pour système HAWA-Frontslide 60/A
EN	Planning: Angled profile support for HAWA-Frontslide 60/A
IT	Progetto: profilo portante angolare per HAWA-Frontslide 60/A
ES	Planificación: Perfil angular portante para HAWA-Frontslide 60/A



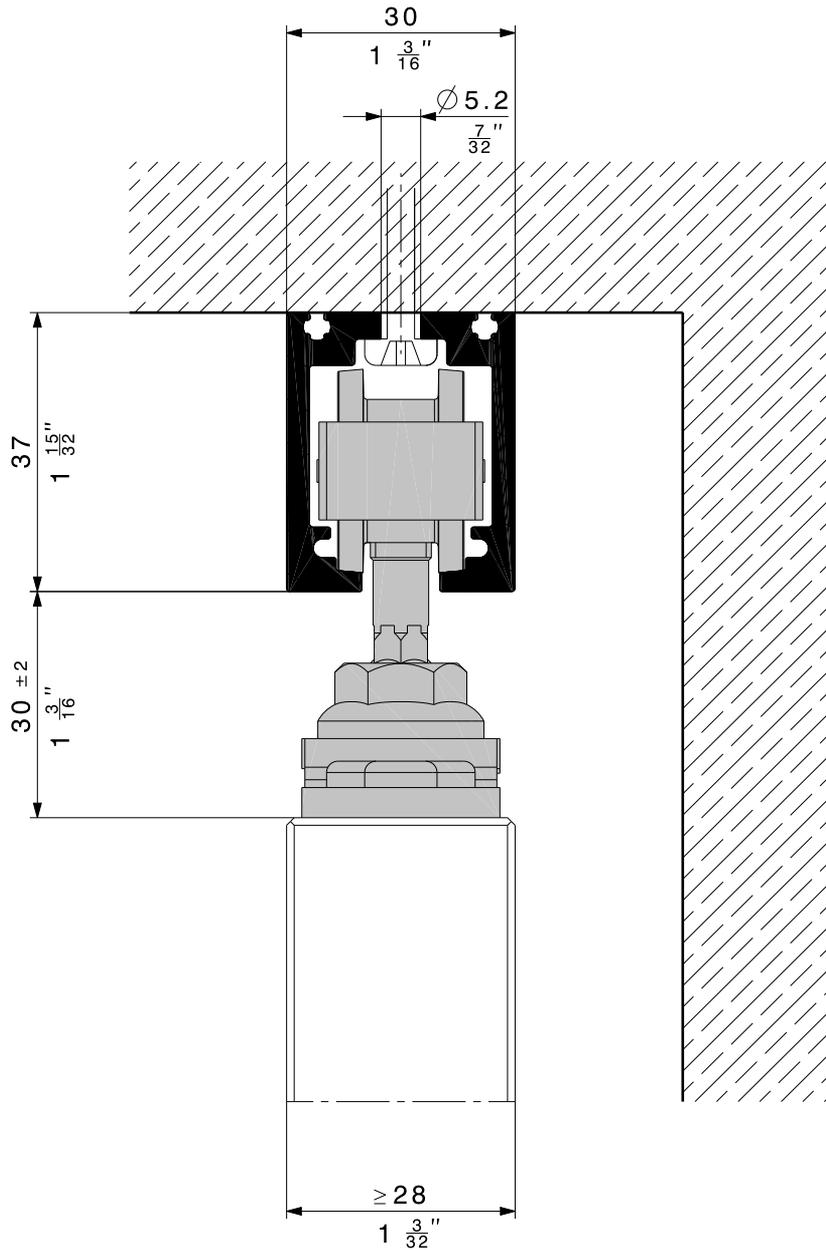
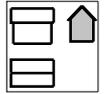
5.4

DE	Planung: Winkeltragprofil mit Distanzprofil zu HAWA-Frontslide 60/A
FR	Planification: profil porteur en équerre avec profil d'écartement pour système HAWA-Frontslide 60/A
EN	Planning: Angled profile support with spacer profile for HAWA-Frontslide 60/A
IT	Progetto: profilo portante angolare con distanziale profilato per HAWA-Frontslide 60/A
ES	Planificación: Perfil angular portante con perfil distanciador para HAWA-Frontslide 60/A



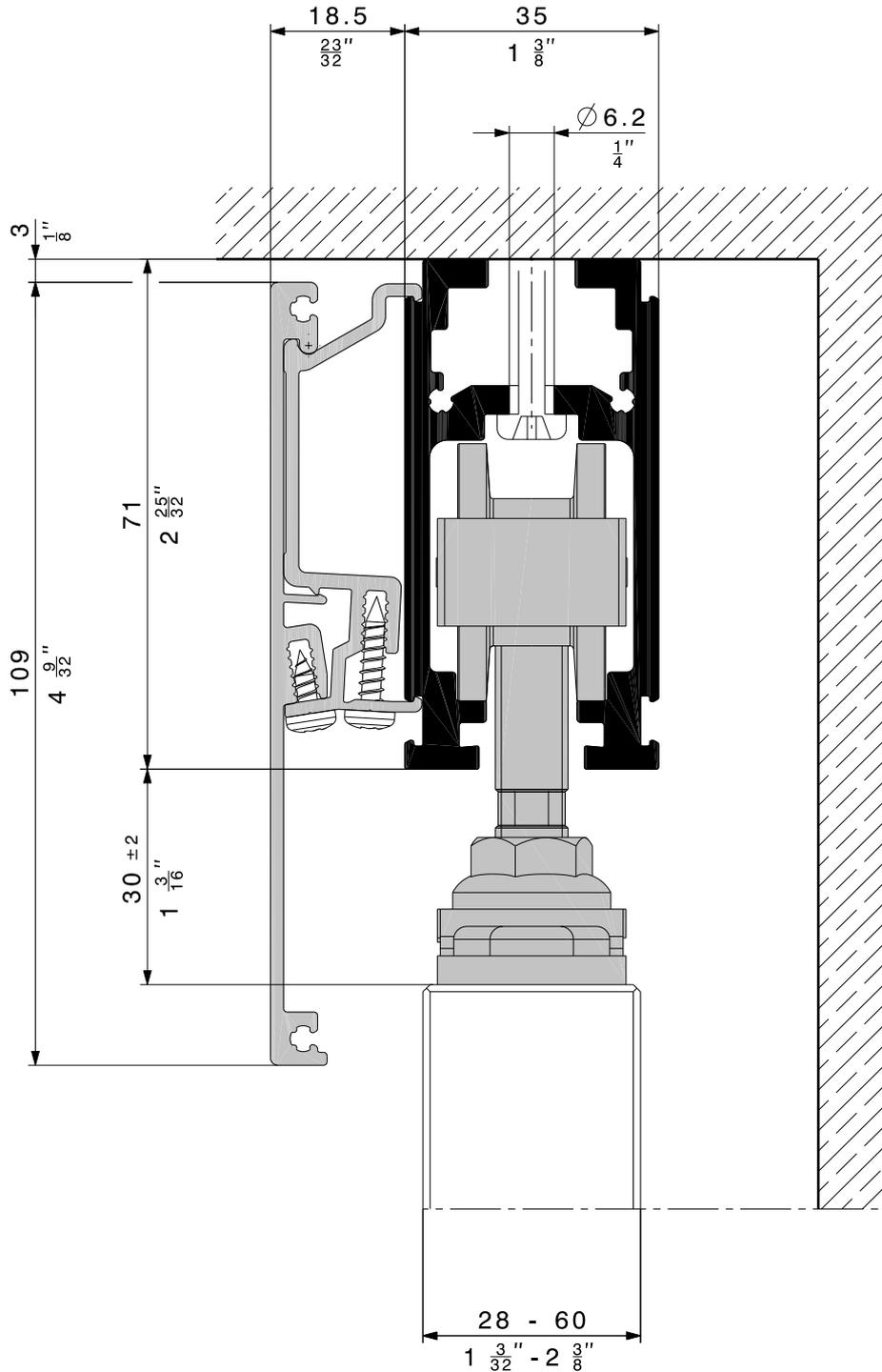
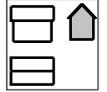
5.5

DE	Planung: Niedere Laufschiene zu HAWA-Frontslide 60/A
FR	Planification: Rail de roulement de faible hauteur pour HAWA-Frontslide 60/A
EN	Planning: Lower top track for HAWA-Frontslide 60/A
IT	Progetto: Binario inferiore per HAWA-Frontslide 60/A
ES	Planificación: Riel de rodadura inferior para HAWA-Frontslide 60/A



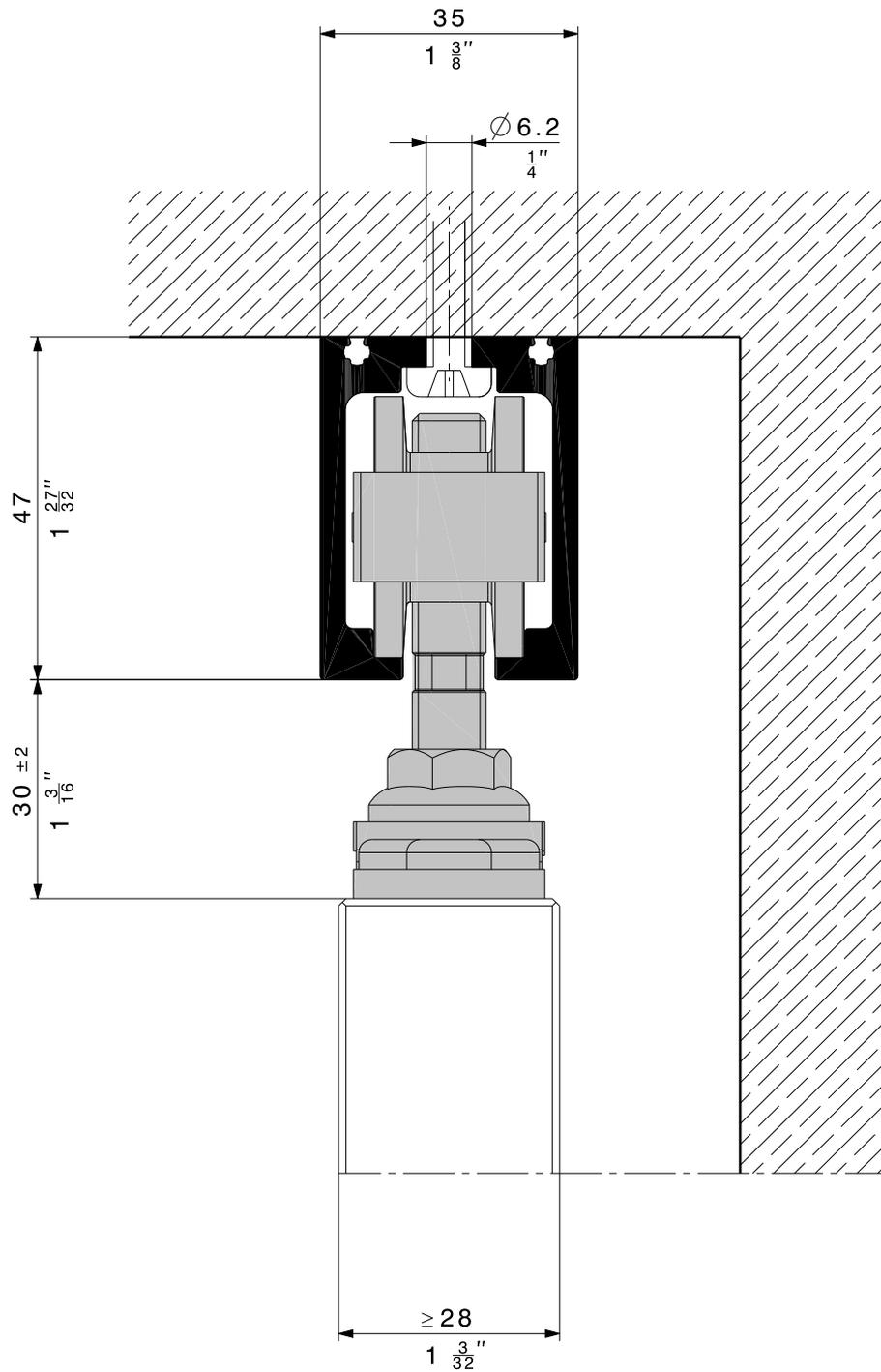
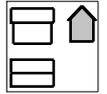
5.6

DE	Planung: HAWA-Frontslide 100/A
FR	Planification: HAWA-Frontslide 100/A
EN	Planning: HAWA-Frontslide 100/A
IT	Progetto: HAWA-Frontslide 100/A
ES	Planificación: HAWA-Frontslide 100/A



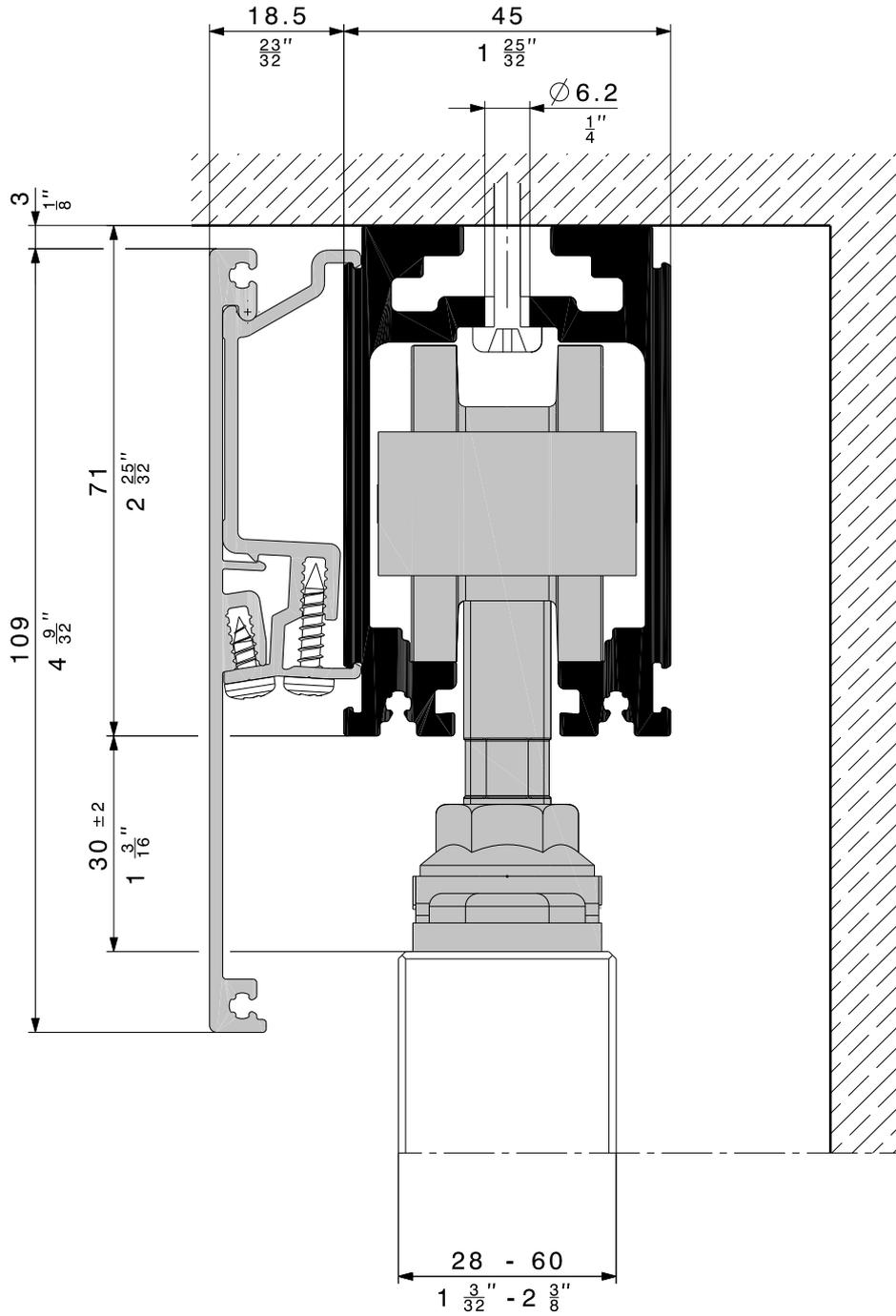
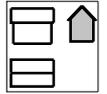
5.7

DE	Planung: Niedere Laufschiene zu HAWA-Frontslide 100/A
FR	Planification: Rail de roulement de faible hauteur pour HAWA-Frontslide 100/A
EN	Planning: Lower top track for HAWA-Frontslide 100/A
IT	Progetto: Binario inferiore per HAWA-Frontslide 100/A
ES	Planificación: Riel de rodadura inferior para HAWA-Frontslide 100/A



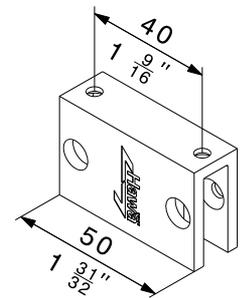
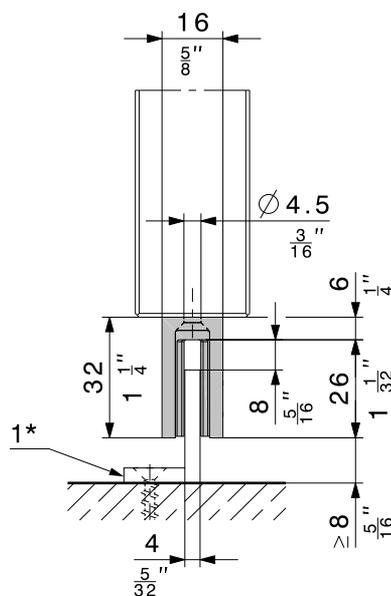
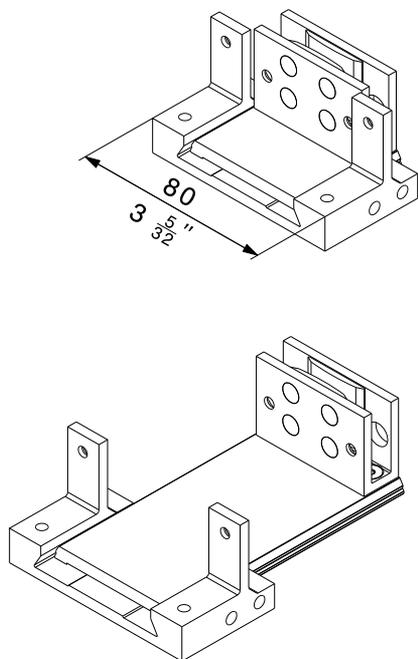
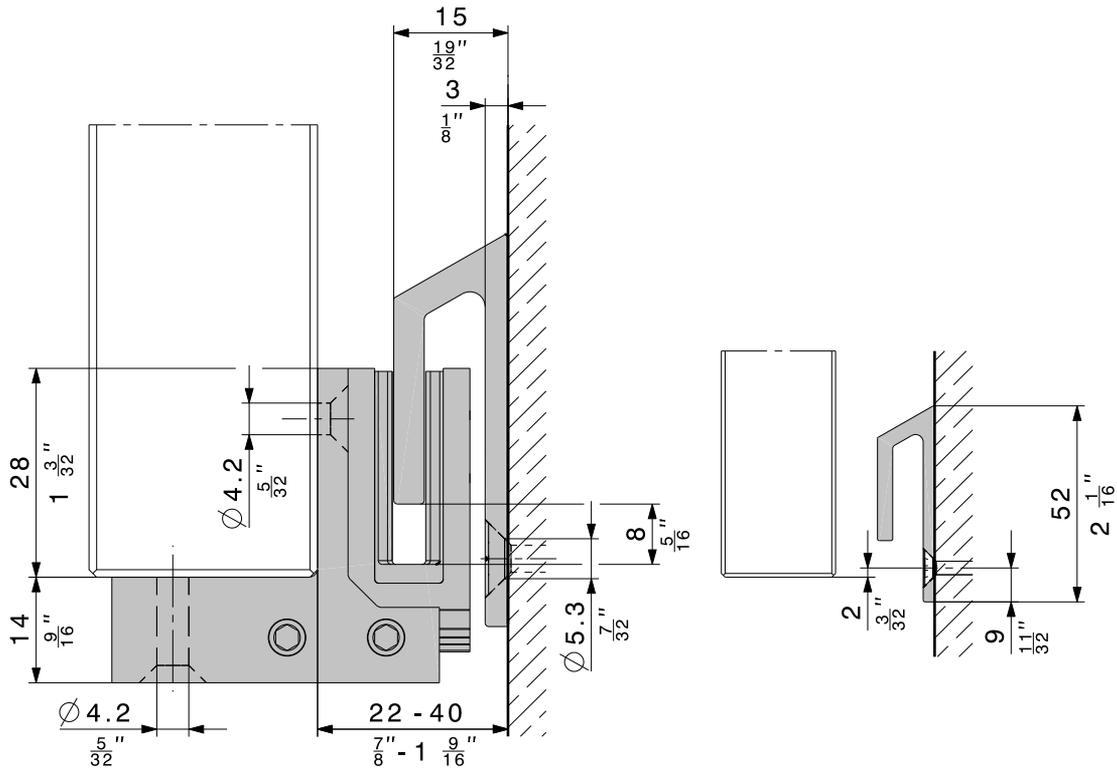
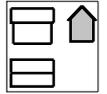
5.8

DE	Planung: HAWA-Frontslide 140/A
FR	Planification: HAWA-Frontslide 140/A
EN	Planning: HAWA-Frontslide 140/A
IT	Progetto: HAWA-Frontslide 140/A
ES	Planificación: HAWA-Frontslide 140/A



5.9

DE	Planung: Führungssituationen
FR	Planification: situations de guidage
EN	Planning: Guide situations
IT	Progetto: situazioni di guida
ES	Planificación: Tipos de montaje de la guía

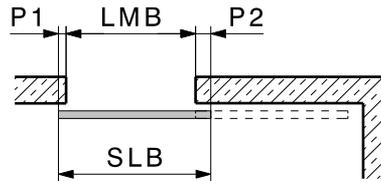
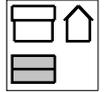


1\* DE bauseits / FR incombant au client / EN provided by customer / IT da parte del committente / ES a suministrar por el cliente

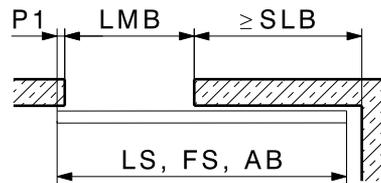
## 6 Berechnung / Calcul / Calculation / Calcoli / Cálculo

### 6.1

DE	<b>Berechnung: Schiebeladenbreite, Laufschiene und Führungsschiene</b>
FR	<b>Calcul: largeur du volet coulissant, rail de roulement et rail de guidage</b>
EN	<b>Calculation: Sliding shutter width, top track and bottom guide channel</b>
IT	<b>Calcolo: larghezza scuro scorrevole, binario e guida</b>
ES	<b>Cálculo: Ancho del postigo deslizante, riel de rodadura y riel de guía</b>



$$SLB = LMB + P1 + P2$$

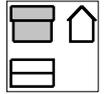


$$LS = (2 \times SLB) - P2$$

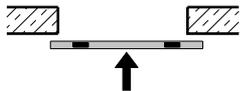
$$FS = LS$$

6.2

DE	<b>Berechnung: Aufhängepunkte</b>
FR	<b>Calcul: points de suspension</b>
EN	<b>Calculation: Suspension points</b>
IT	<b>Calcolo: punti di sospensione</b>
ES	<b>Cálculo: Puntos de suspensión</b>

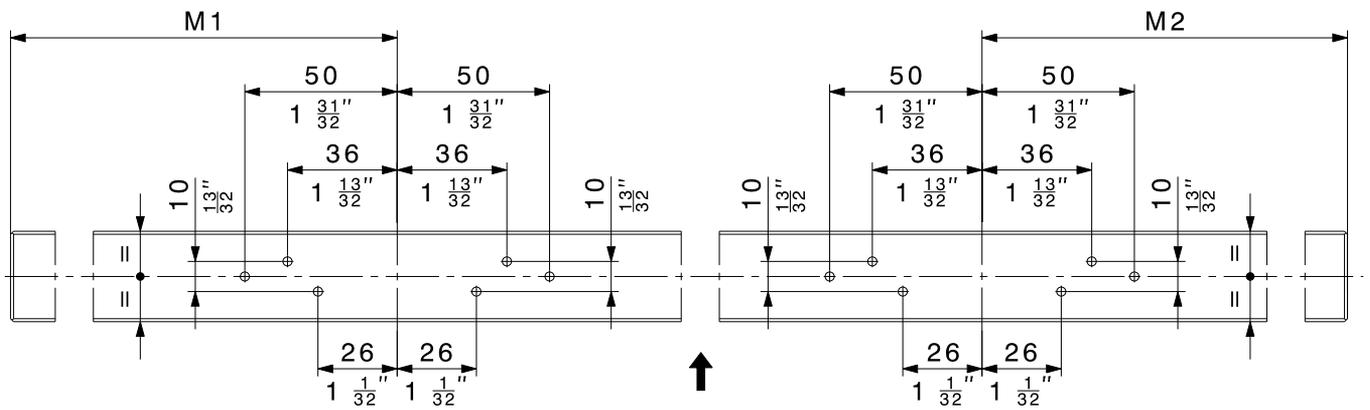
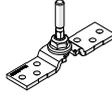
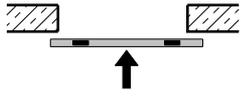
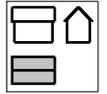


DE FR EN IT ES	System / Abstand in mm/inch Système / Distance en mm (pouces) System / distance in mm (inch) Sistema / Distanza in mm (inch) Sistema / Distancia en mm (pulgadas)	M1	M2
	<b>HAWA-Frontslide 60/A</b>	110 (4 $\frac{11}{32}$ )	110 (4 $\frac{11}{32}$ )
	<b>HAWA-Frontslide 100/A</b>	130 (5 $\frac{1}{8}$ )	130 (5 $\frac{1}{8}$ )
	<b>HAWA-Frontslide 140/A</b>	170 (6 $\frac{11}{16}$ )	170 (6 $\frac{11}{16}$ )



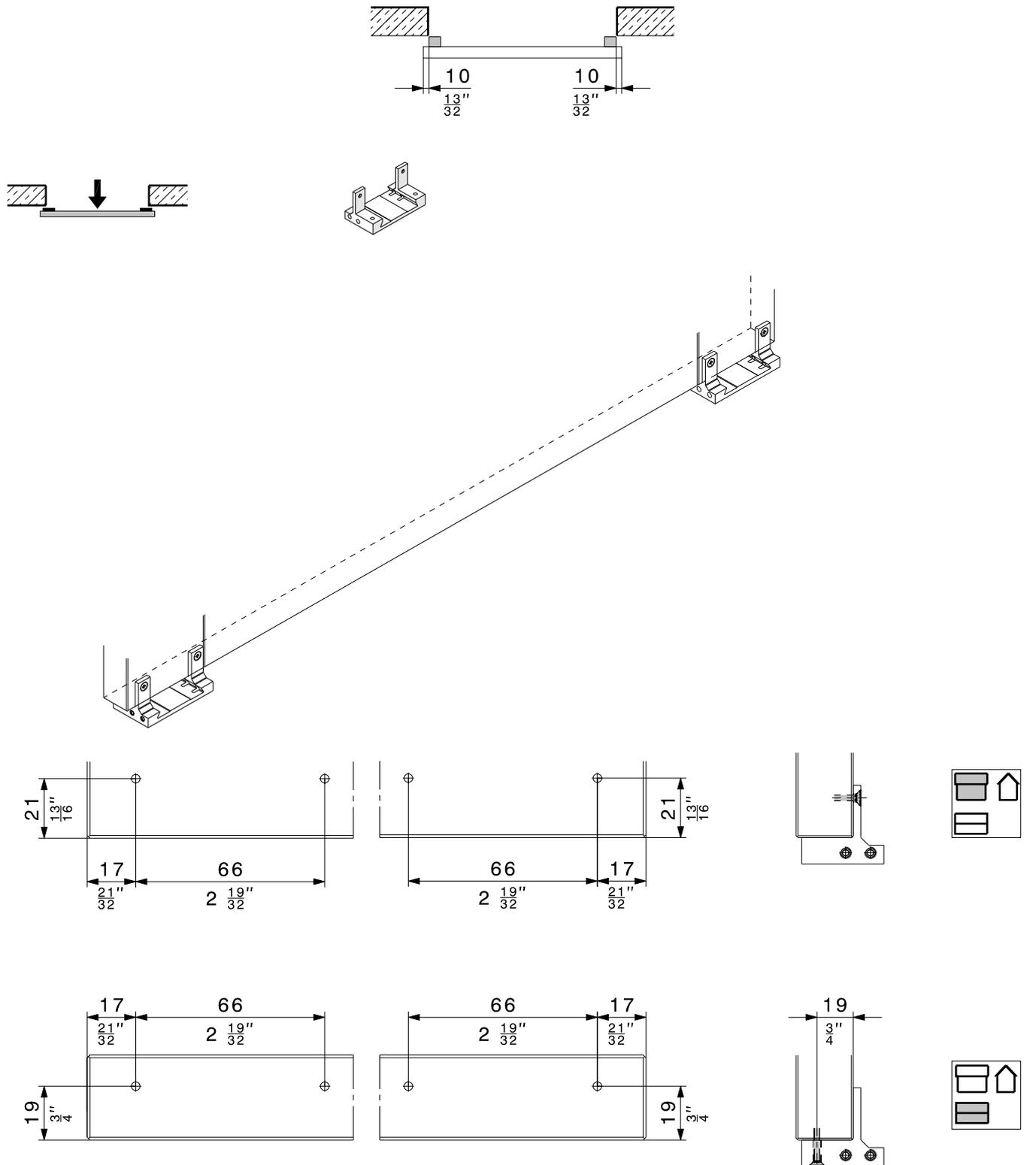
6.3

- DE **Berechnung: Bohrungen Schiebeladen**
- FR **Calcul: perçages du volet coulissant**
- EN **Calculation: Drill holes, sliding shutter**
- IT **Calcolo: fori scuro scorrevole**
- ES **Cálculo: Orificios postigo deslizante**



6.4

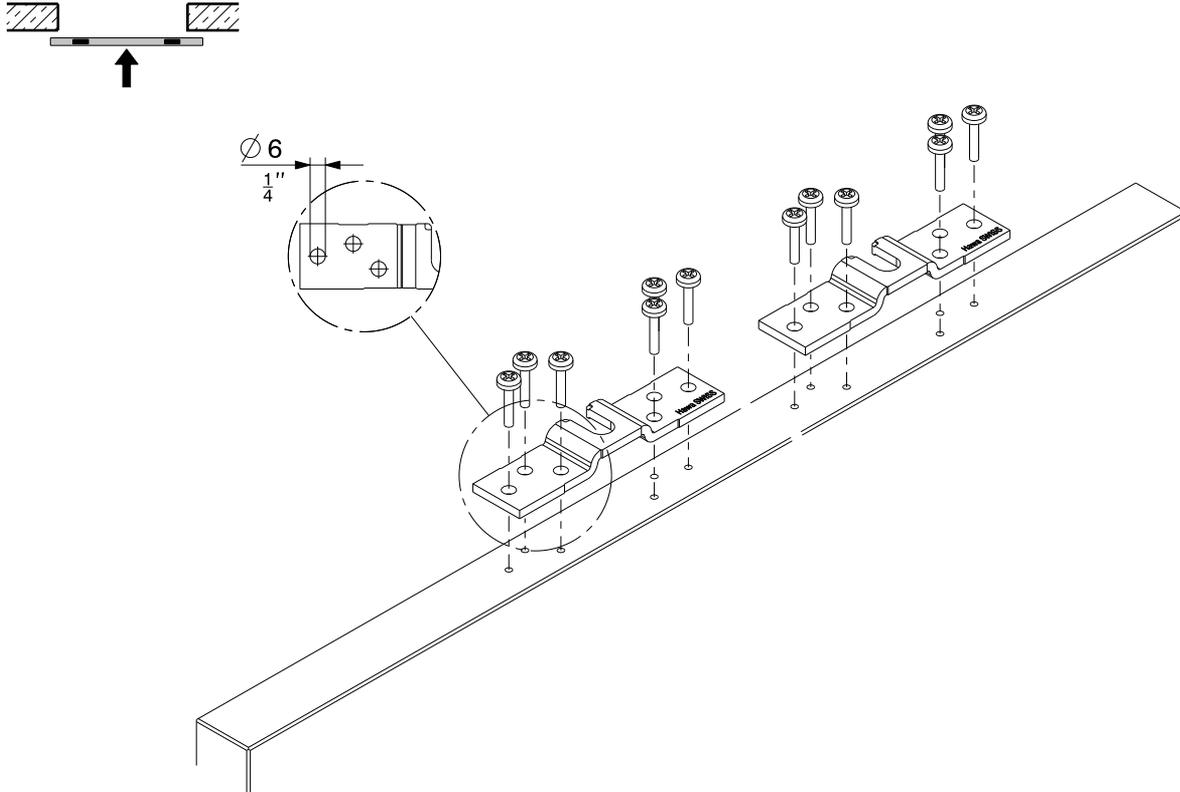
DE	<b>Berechnung: Bohrungen untere Schiebeladenführung</b>
FR	<b>Calcul: perçages du guide inférieur du volet coulissant</b>
EN	<b>Calculation: Drill holes, bottom sliding shutter guide</b>
IT	<b>Calcolo: fori guida inferiore scuro scorrevole</b>
ES	<b>Cálculo: Orificios guía inferior postigo deslizante</b>

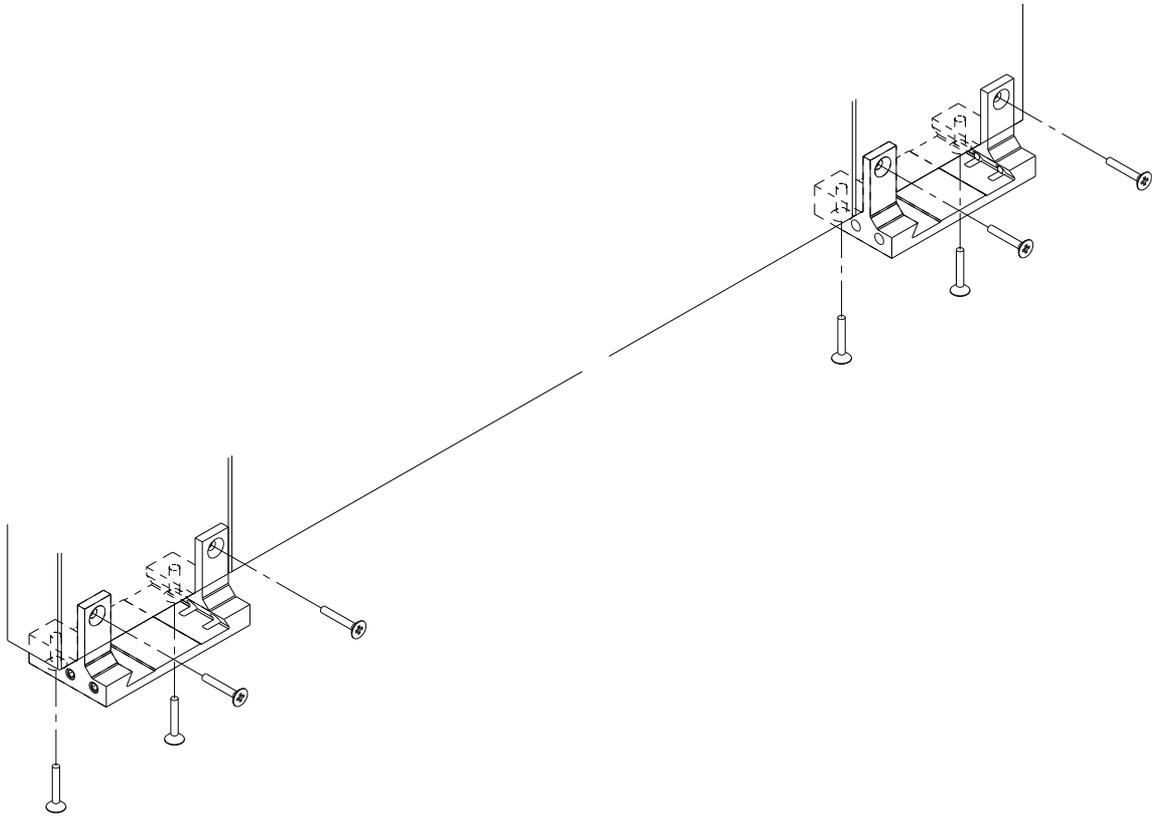
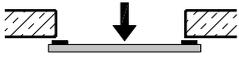


## 7 Vormontage / Prémontage / Pre-assembly / Premontaggio / Montaje previo

### 7.1

DE	<b>Vormontage: Schiebeladen</b>
FR	<b>Prémontage: volet coulissant</b>
EN	<b>Pre-assembly: Sliding shutter</b>
IT	<b>Premontaggio: scuro scorrevole</b>
ES	<b>Montaje previo: Postigo deslizante</b>

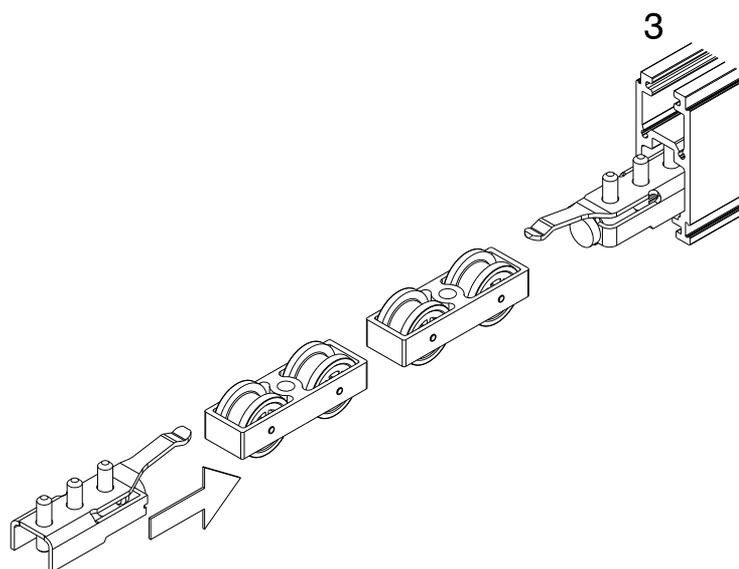
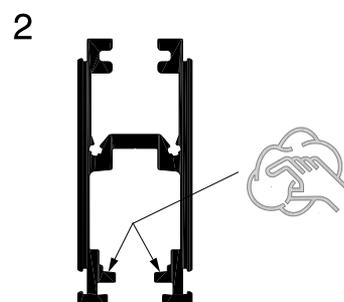
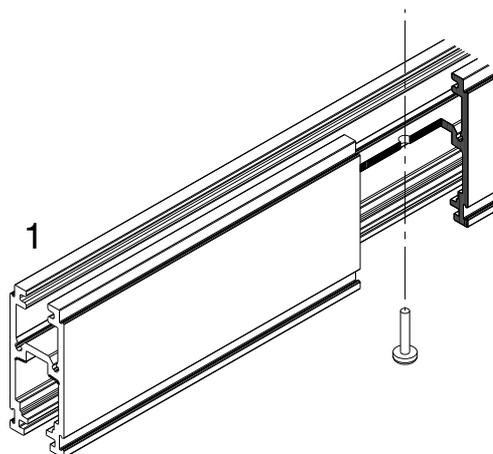




## 8 Montage / Montage / Assembly / Montaggio / Montaje

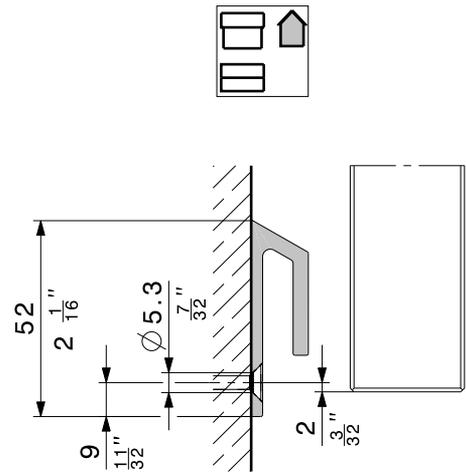
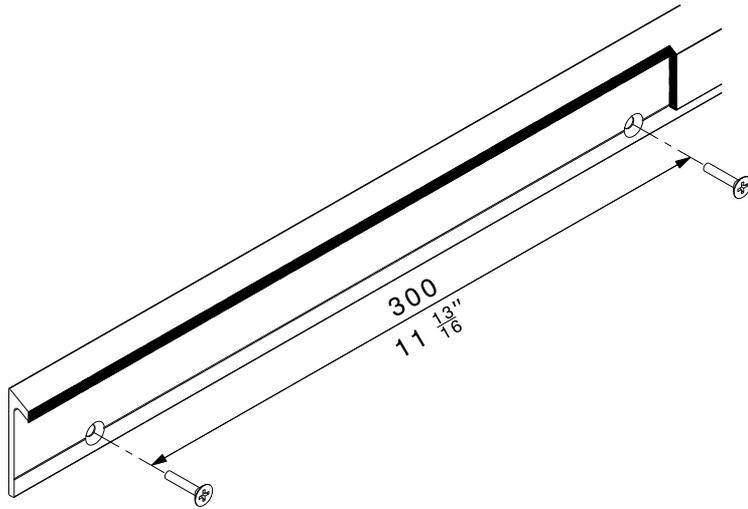
### 8.1

DE	<b>Montage: Laufschiene</b>
FR	<b>Montage: rail de roulement</b>
EN	<b>Assembly: Top track</b>
IT	<b>Montaggio: binario</b>
ES	<b>Montaje: Riel de rodadura</b>



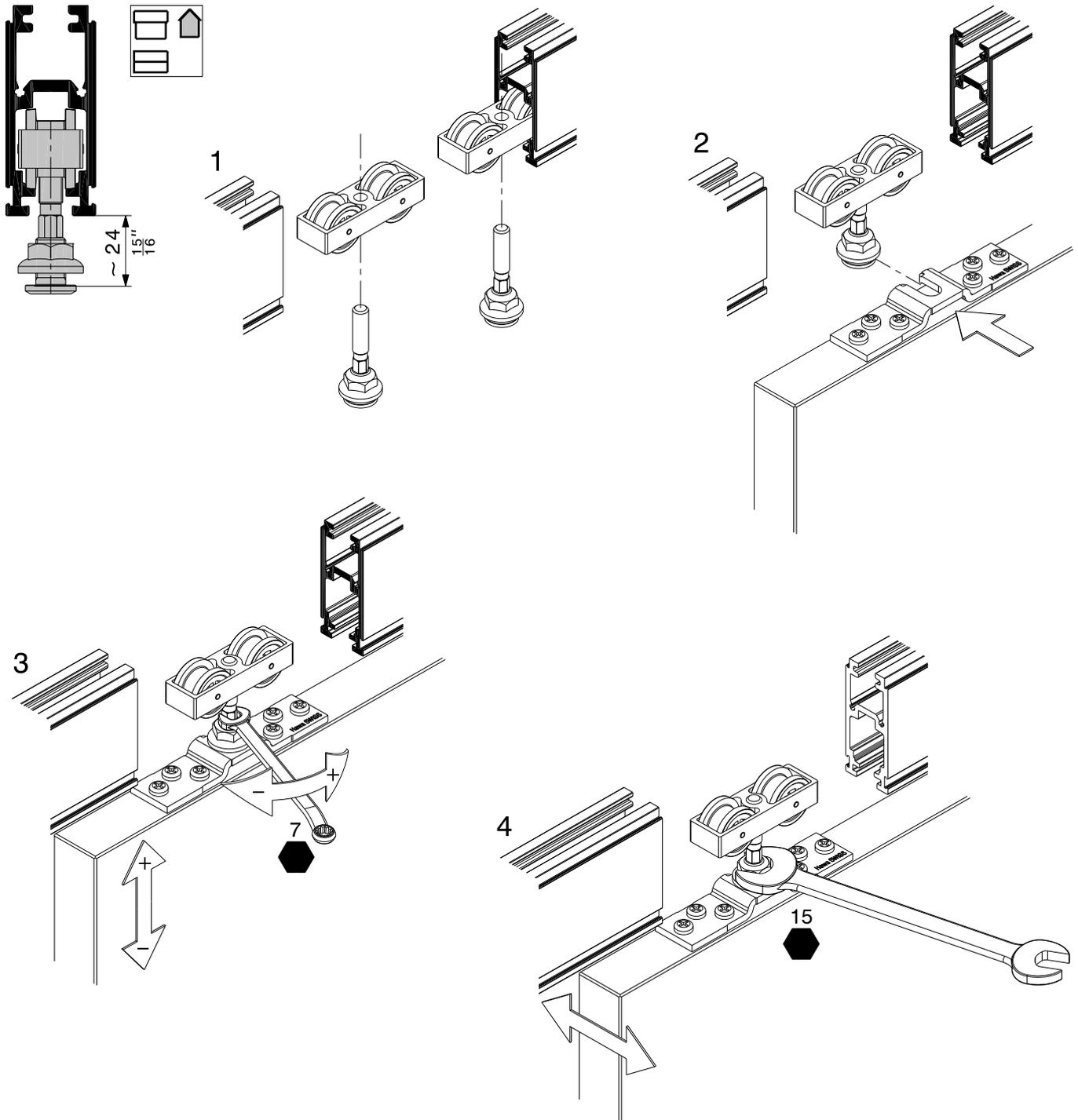
8.2

DE	Montage: Führungsschiene
FR	Montage: rail de guidage
EN	Assembly: Bottom guide channel
IT	Montaggio: guida
ES	Montaje: Riel guía



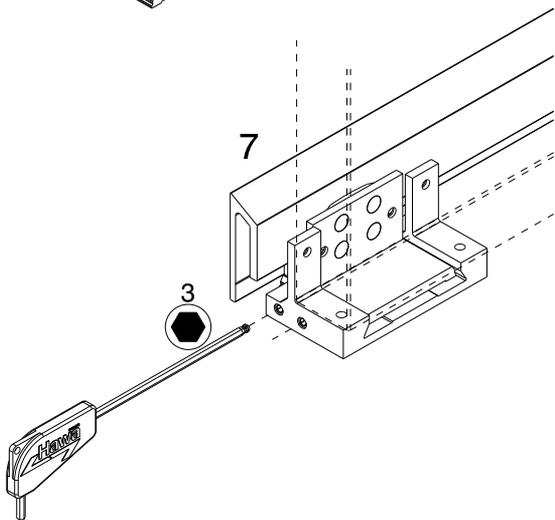
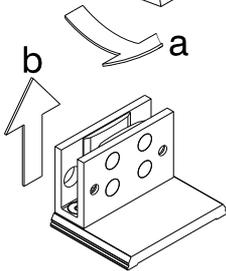
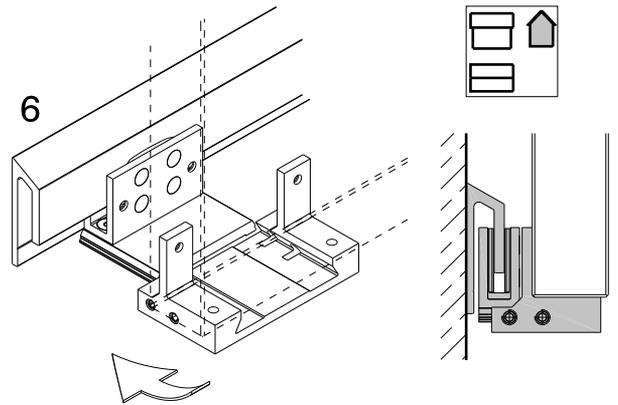
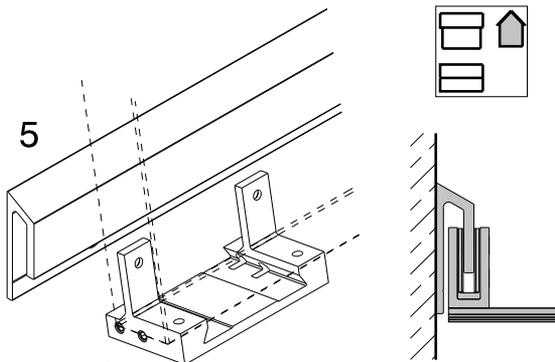
8.3

DE	Montage: Schiebeladen
FR	Montage: volet coulissant
EN	Assembly: Sliding shutter
IT	Montaggio: scuro scorrevole
ES	Montaje: Postigo deslizante



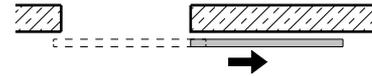
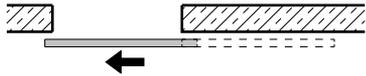
- a** **DE** Schiebeladen leicht nach vorne ziehen  
**FR** Tirer légèrement le volet coulissant vers l'avant  
**EN** Pull the sliding shutters slightly forwards  
**IT** Tirare leggermente avanti lo scuro scorrevole  
**ES** Tirar del postigo deslizante ligeramente hacia delante

- b** **DE** Schiebeladenführung in Führungsschiene einsetzen  
**FR** Introduire le guide du volet coulissant dans le rail de guidage  
**EN** Insert the sliding shutter guide into the bottom guide channel  
**IT** Introdurre la guida dello scuro scorrevole nella guida  
**ES** Introducir la guía del postigo deslizante en el riel de guía



8.4

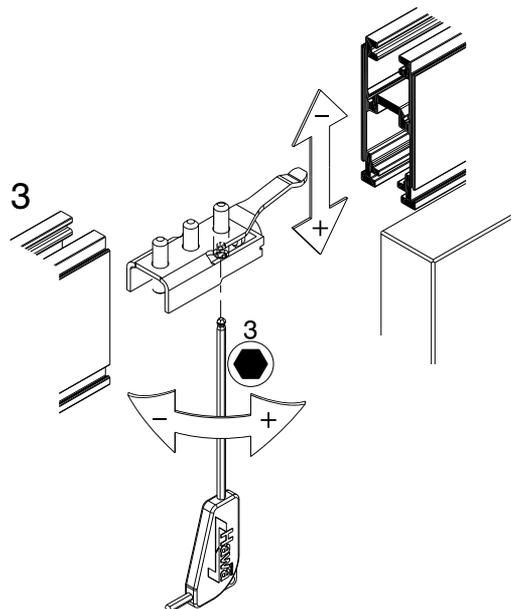
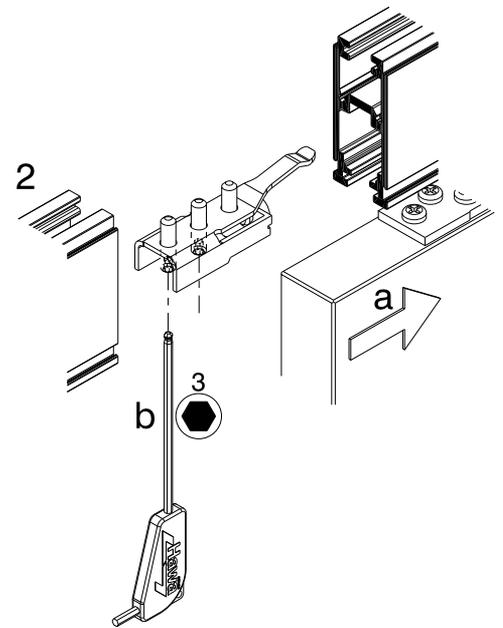
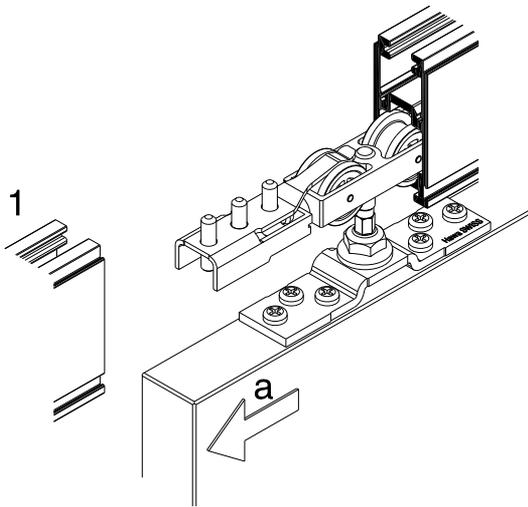
<b>DE</b>	<b>Montage: Schienenpuffer</b>
<b>FR</b>	<b>Montage: butée de rail</b>
<b>EN</b>	<b>Assembly: track stop</b>
<b>IT</b>	<b>Montaggio: paracolpi per binario</b>
<b>ES</b>	<b>Montaje: tope de riel</b>



- 1 a**
- DE** Schiebeladen schliessen
  - FR** Fermer le volet coulissant
  - EN** Close the sliding shutter
  - IT** Chiudere lo scuro scorrevole
  - ES** Cerrar el postigo deslizante

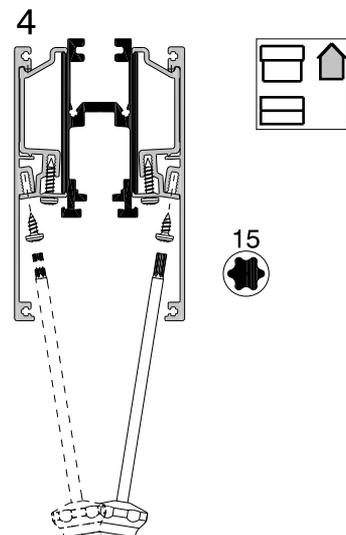
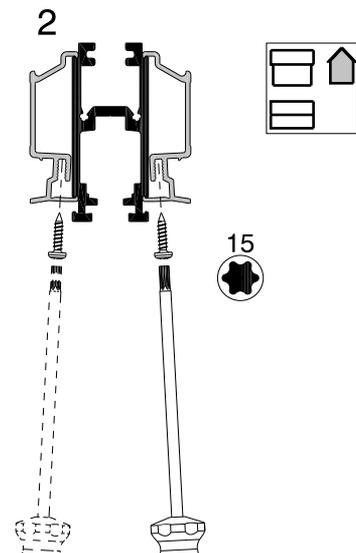
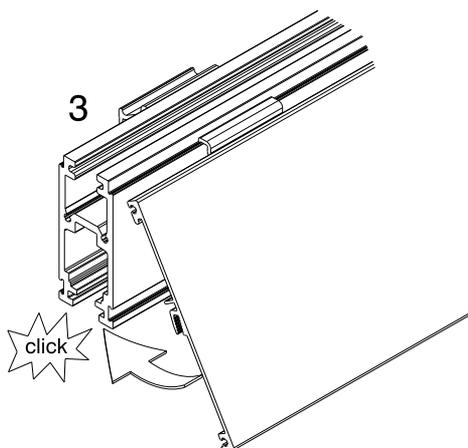
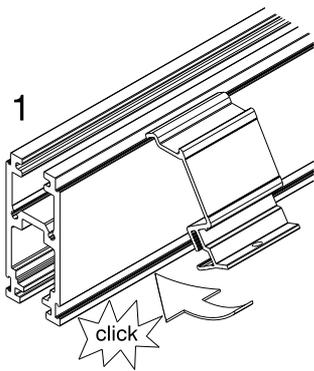
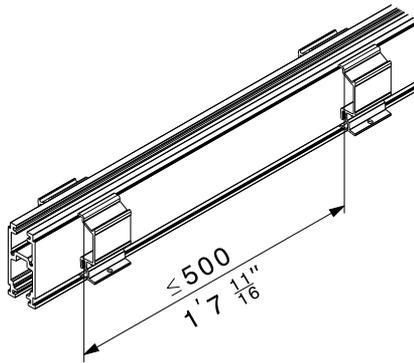
- 2 a**
- DE** Schiebeladen öffnen
  - FR** Ouvrir le volet coulissant
  - EN** Open the sliding shutter
  - IT** Aprire lo scuro scorrevole
  - ES** Abrir postigo deslizante

- 2 b**
- DE** Schienenpuffer in dieser Position fixieren
  - FR** Fixer la butée de rail dans cette position
  - EN** Set the track stop at this position
  - IT** Fissare paracolpi in questa posizione
  - ES** Fijar tope de riel en esta posición



8.5

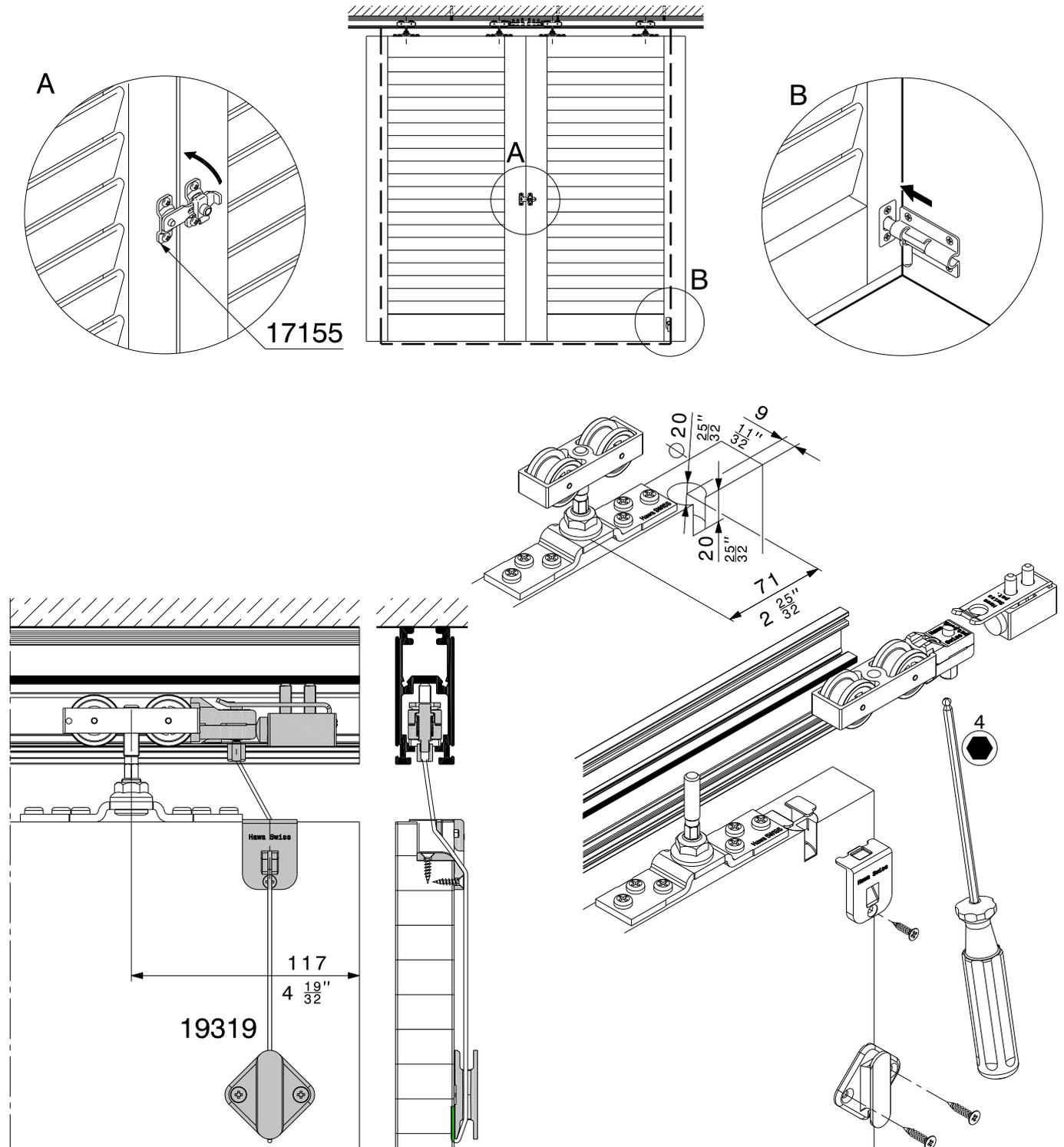
DE	<b>Montage: Verblendung</b>
FR	<b>Montage: cache</b>
EN	<b>Assembly: Cover</b>
IT	<b>Montaggio: rivestimento</b>
ES	<b>Montaje: Cobertura</b>



## 9 Optionales / En option / Optional / Opzioni / Opcional

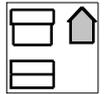
### 9.1

DE	<b>Optionales: Schliess- und Arretiermöglichkeiten HAWA-Frontslide 60/A</b>
FR	<b>En option: possibilités de fermeture et de blocage HAWA-Frontslide 60/A</b>
EN	<b>Optional: Locking and securing options HAWA-Frontslide 60/A</b>
IT	<b>Opzioni: Possibilità di chiusura e arresto HAWA-Frontslide 60/A</b>
ES	<b>Opcional: Opciones de cierre y detención HAWA-Frontslide 60/A</b>



9.2

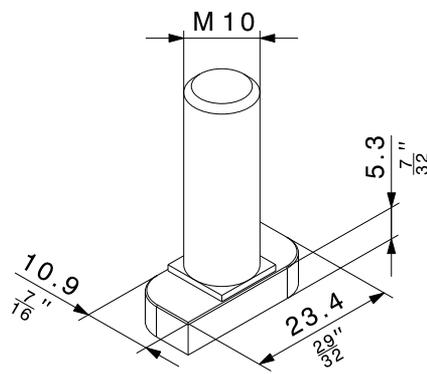
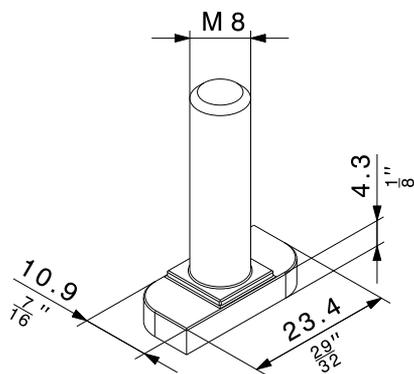
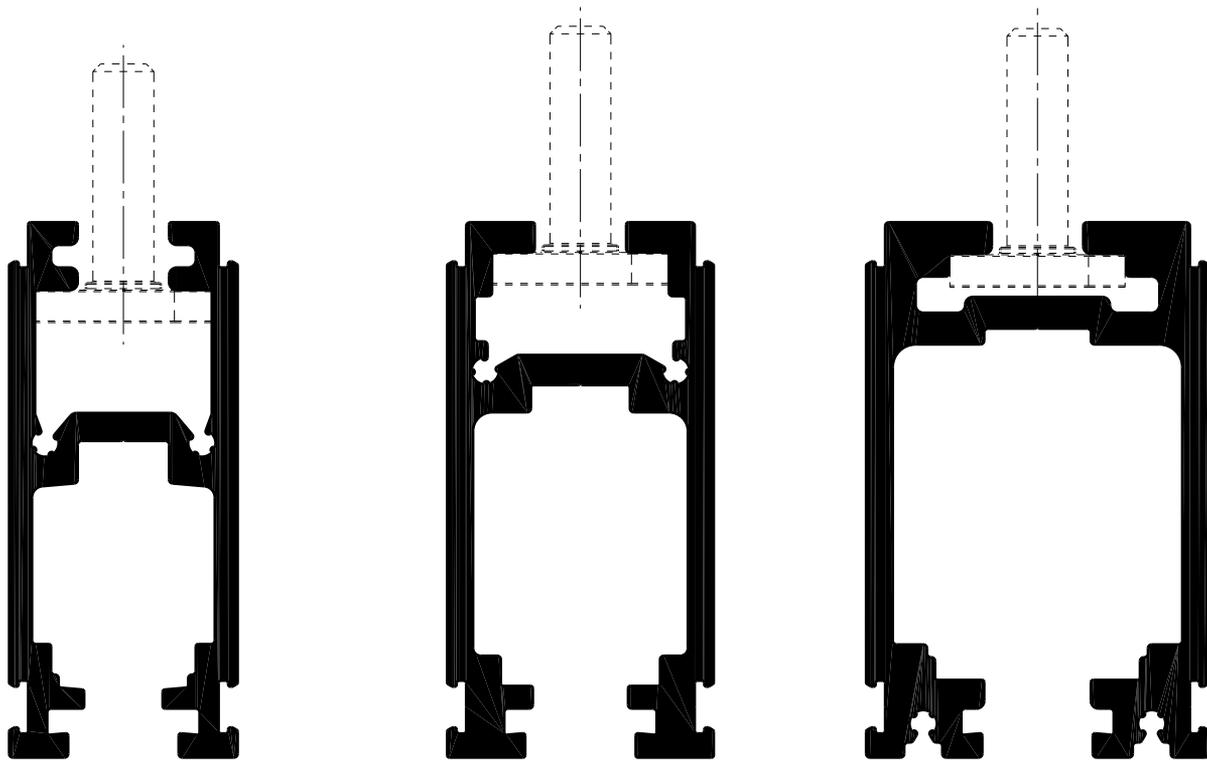
DE	Optionales: Montage mit bauseitiger Hammerkopfschraube Typ 28/15
FR	En option: montage avec vis à tête rectangulaire avec angles abattus de type 28/15 du client
EN	Optional: Assembly using hammer head bolts type 28/15 provided by the customer
IT	Opzioni: montaggio mediante vite con testa a martello tipo 28/15 da parte del committente
ES	Opcional: Montaje con tornillo con cabeza de martillo en obra 28/15 suministrado por el cliente



HAWA-Frontslide 60/A

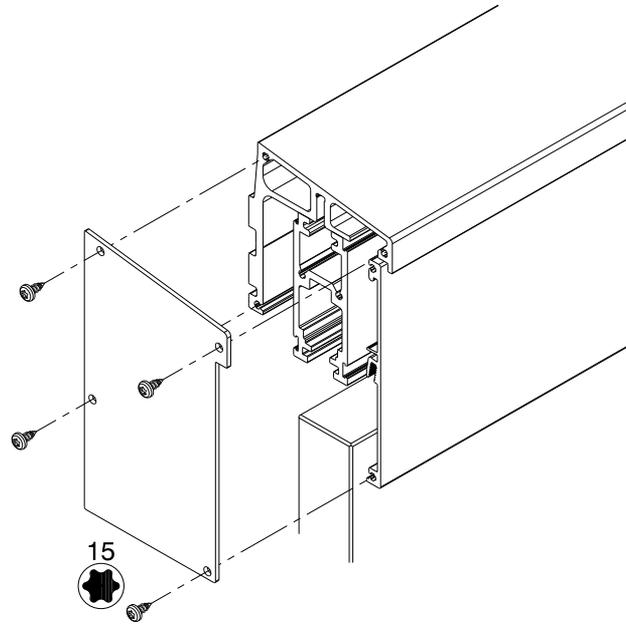
HAWA-Frontslide 100/A

HAWA-Frontslide 140/A



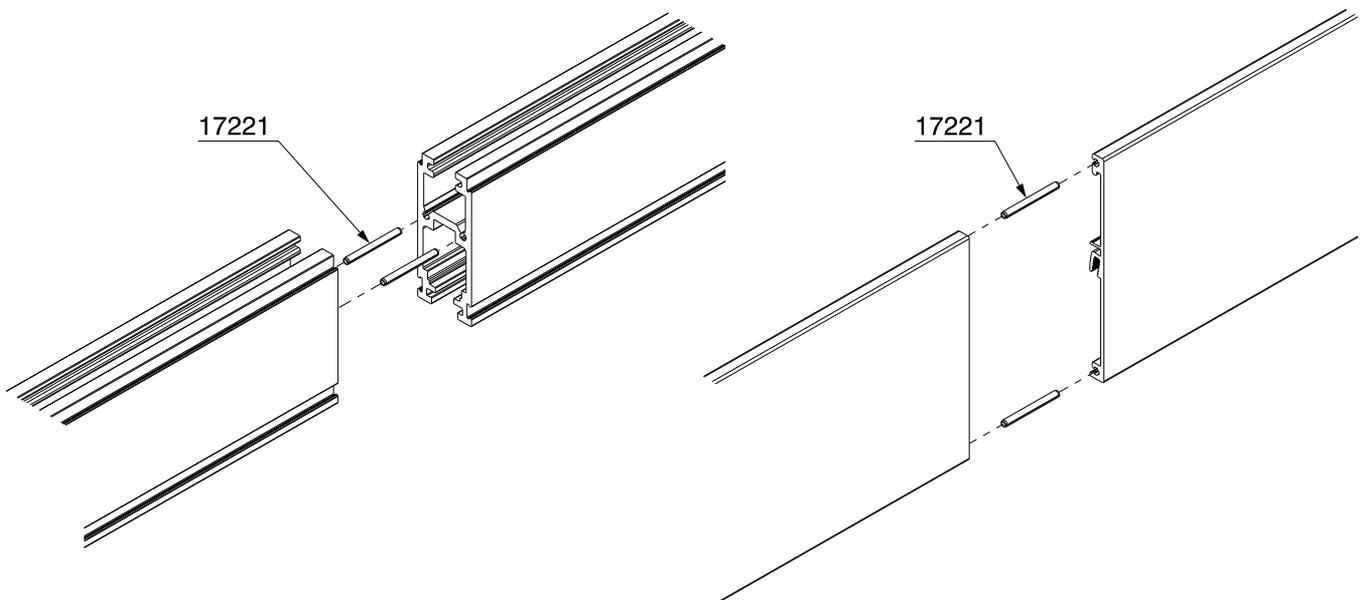
9.3

- DE **Optionales: Abdeckkappe**
- FR **En option: cache de recouvrement**
- EN **Optional: Cover cap**
- IT **Opzioni: copriforo**
- ES **Opcional: Tapa**



9.4

- DE **Optionales: Verbindungsstifte**
- FR **En option: goujons de raccordement**
- EN **Optional: Connecting pins**
- IT **Opzioni: spine di collegamento**
- ES **Opcional: Pasadores de unión**





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