

# VISS Basic Tragkonstruktion

Verarbeitung und Montage

# Construction porteuse VISS Basic

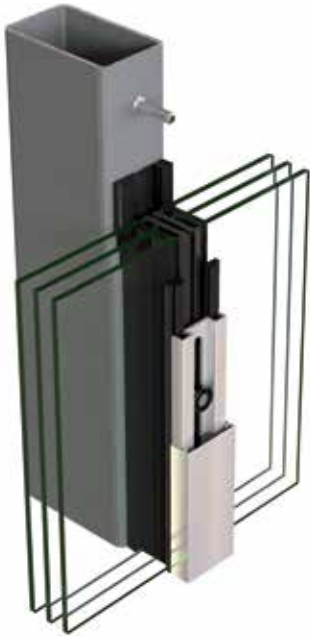
Usinage et montage

# VISS Basic supporting structure

Processing and assembly

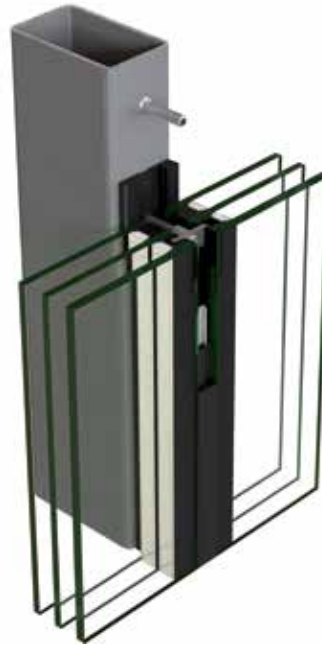
# Struttura portante VISS Basic

Lavorazione e montaggio



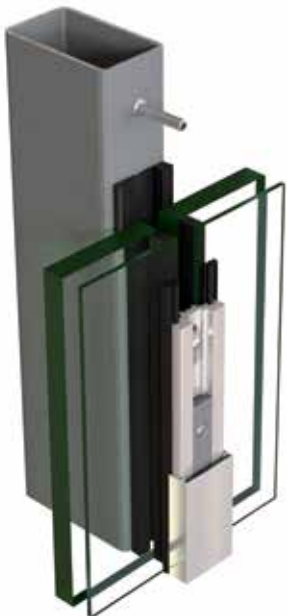
### VISS Basic

Hochwärmegedämmte Vertikalfassade  
Façade verticale à haute rupture de pont thermique  
High thermally insulated vertical façade  
Facciata verticale con elevato isolamento termico



### VISS Basic SG / VISS Basic Semi SG

Ganzglasfassade (Structural Glazing)  
Façade tout en verre (Structural Glazing)  
Structural Glazing façade  
Facciata tutto vetro (structural glazing)



### VISS Basic RC

Einbruchhemmende Fassade  
Façade anti-effraction  
Burglar protection façade  
Facciata antieffrazione

|                                                                                           |                                                                                                    |           |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------|
| <b>Hinweise</b><br><b>Remarques</b>                                                       | <b>Information</b><br><b>Avvertenze</b>                                                            | <b>2</b>  |
| <b>Konstruktionsvarianten</b><br><b>Variante de construction</b>                          | <b>Design options</b><br><b>Varianti costruttivi</b>                                               | <b>4</b>  |
| <b>Universal T-Verbinder</b><br><b>Raccord en T universel</b>                             | <b>Universal connecting spigot</b><br><b>Raccordo a T universale</b>                               | <b>6</b>  |
| <b>Schwerlast T-Verbinder einhängbar</b><br><b>Raccord en T charge lourde à suspendre</b> | <b>Heavy-duty clip-in connecting spigot</b><br><b>Raccordo a T per carichi elevati ad incastro</b> | <b>18</b> |
| <b>Elemente geschweisst</b><br><b>Éléments soudés</b>                                     | <b>Welded units</b><br><b>Elementi saldati</b>                                                     | <b>32</b> |
| <b>Bauanschlüsse</b><br><b>Raccords au mur</b>                                            | <b>Attachment to structure</b><br><b>Raccordi alla muratura</b>                                    | <b>43</b> |
| <b>Systemtoleranzen</b><br><b>Tolérances du système</b>                                   | <b>System tolerances</b><br><b>Tolleranze del sistema</b>                                          | <b>50</b> |

Alle Ausführungen dieser Dokumentation haben wir sorgfältig und nach bestem Wissen zusammengestellt. Wir können aber keine Verantwortung für die Benützung der vermittelten Vorschläge und Daten übernehmen.

Nous avons apporté le plus grand soin à l'élaboration de cette documentation. Cependant, nous déclinons toute responsabilité pour l'utilisation faite de nos propositions et de nos données.

All the information contained in this documentation is given to the best of our knowledge and ability. However, we decline all responsibility for the use made of these suggestions and data.

Abbiamo dedicato la massima cura alla preparazione della presente documentazione. Decliniamo tuttavia ogni responsabilità per l'uso delle proposte e dei dati da noi forniti.

### Allgemeine Hinweise

Beim vorliegenden System VISS-Basic handelt es sich um eine anwendungstechnische Erweiterung der VISS-Systeme. System-Zubehörteile ermöglichen den Dichtungs Aufbau auch auf **systemunabhängige Tragkonstruktionen**.

Das Konstruktionsprinzip des Verglasungssystems beruht auf den bekannten VISS-Systemen.

**Diese Verarbeitungs- und Montagerichtlinie behandelt lediglich den Aufbau der Tragkonstruktion insbesondere die Verbindungen von Pfosten zu Riegel für VISS Basic-Vertikalfassaden.**

Detaillierte Informationen zur Verarbeitung und Montage der Dichtungssysteme, Zubehörteile, Füllelemente finden Sie in den jeweiligen Verarbeitungs- und Montagerichtlinien der einzelnen Systeme:

- VISS Basic
- VISS Basic SG
- VISS Basic RC

**Die Tragkonstruktion ist grundsätzlich immer raumseitig anzuordnen.**

### General information

The VISS Basic system extends the range of applications of the VISS systems. The system accessories also allow sealing against **load-bearing structures from any system**.

The design of the glazing system is based on the renowned VISS systems.

**These fabrication and installation guidelines only cover the construction of the load-bearing structure, in particular the mullion/transom joints for VISS Basic vertical façades.**

Detailed information on the fabrication and installation of the sealing systems, accessories and infill units can be found in the respective fabrication and installation guidelines for the individual systems:

- VISS Basic
- VISS Basic SG
- VISS Basic RC

**The load-bearing structure must always be positioned on the room side.**

### Remarques générales

Le système VISS-Basic que nous vous proposons est une extension des applications des systèmes VISS. Les accessoires du système permettent également l'étanchéification sur les **constructions porteuses indépendantes d'un système**.

Le principe de construction du système de vitrage repose sur les systèmes VISS connus.

**Cette directive d'usinage et de montage traite uniquement du montage de la construction porteuse, en particulier des assemblages de montants et de traverses pour les façades verticales VISS Basic.**

Des informations détaillées sur l'usinage et le montage des systèmes d'étanchéité, des accessoires et des éléments de remplissage sont données dans les directives d'usinage et de montage des différents systèmes:

- VISS Basic
- VISS Basic SG
- VISS Basic RC

**La construction porteuse est toujours disposée côté intérieur.**

### Avvertenze generali

Il presente sistema VISS Basic costituisce un ampliamento tecnico ed applicativo dei sistemi VISS. Grazie agli accessori è possibile montare le guarnizioni anche su **strutture portanti indipendenti dal sistema**.

Il principio costruttivo di questo sistema di vetratura si basa sui noti sistemi VISS.

**Le presenti istruzioni per la lavorazione e il montaggio si limitano a spiegare la disposizione della struttura portante, in particolare i collegamenti tra i montanti e i traversi per le facciate verticali VISS Basic.**

Per informazioni dettagliate sulla lavorazione e il montaggio dei sistemi di guarnizioni, degli accessori e degli elementi di riempimento si consiglia di consultare il manuale di istruzioni per la lavorazione e il montaggio del sistema in uso:

- VISS Basic
- VISS Basic SG
- VISS Basic RC

**Costruzione portante applicata sul lato interno.**

**Bauweise VISS Basic Tragkonstruktionen**

**Type de construction porteuse VISS Basic**

**Construction of VISS Basic load-bearing structures**

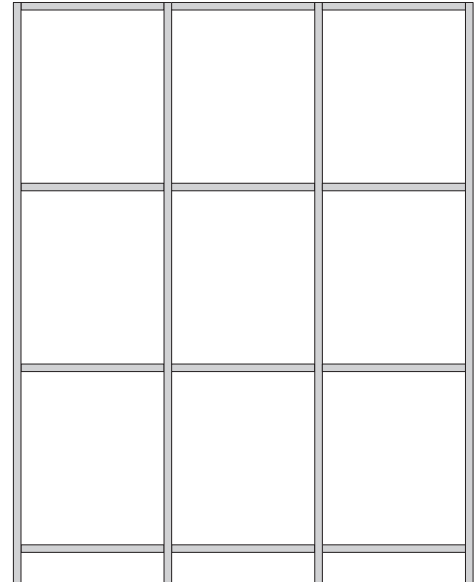
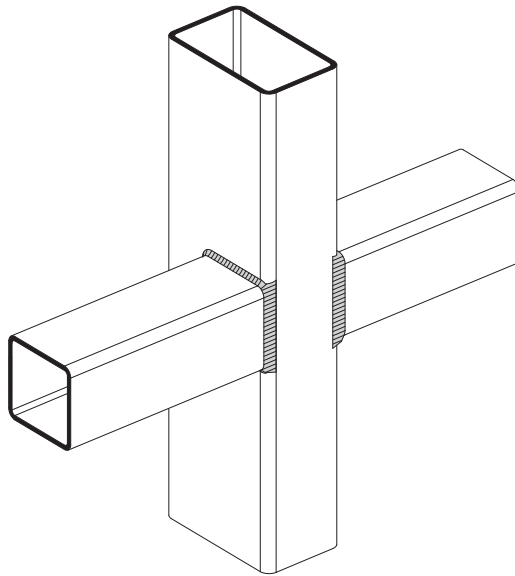
**Tipologie di costruzione delle strutture portanti VISS Basic**

Rahmenbauweise  
 Riegel geschweisst

Méthode de construction  
 par éléments traverse soudée

Unitised construction  
 for welded transom

Costruzione a elementi  
 con traverso saldato

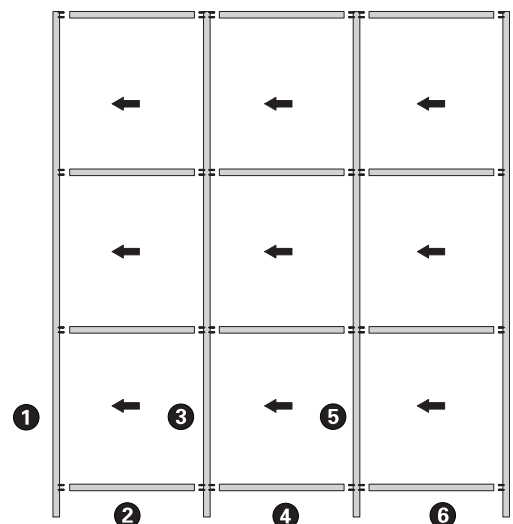
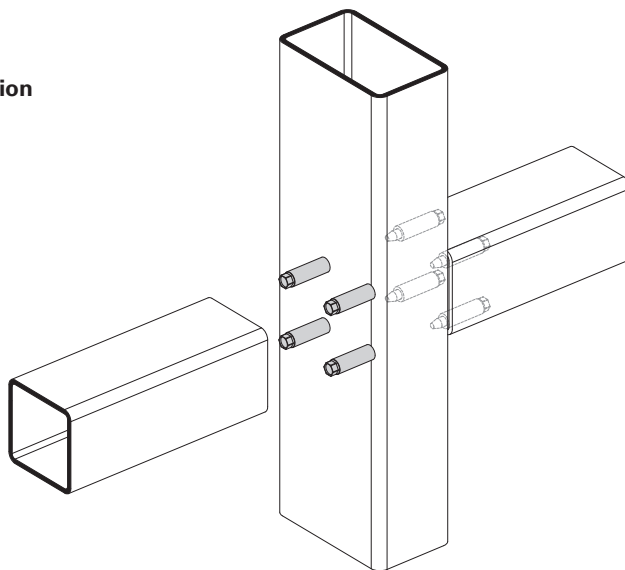


Steckbauweise mit  
 Universal T-Verbinder

Méthode de construction  
 modulaire avec  
 raccord en T universel

Push-on construction  
 with Universal  
 connecting spigot

Costruzione modulare  
 con raccordo  
 a T universale

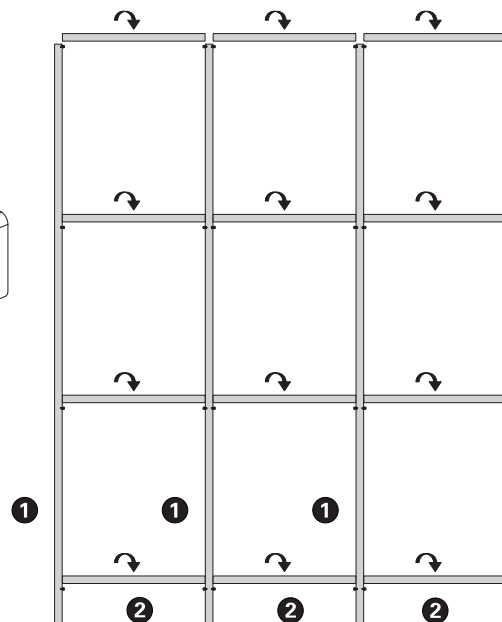
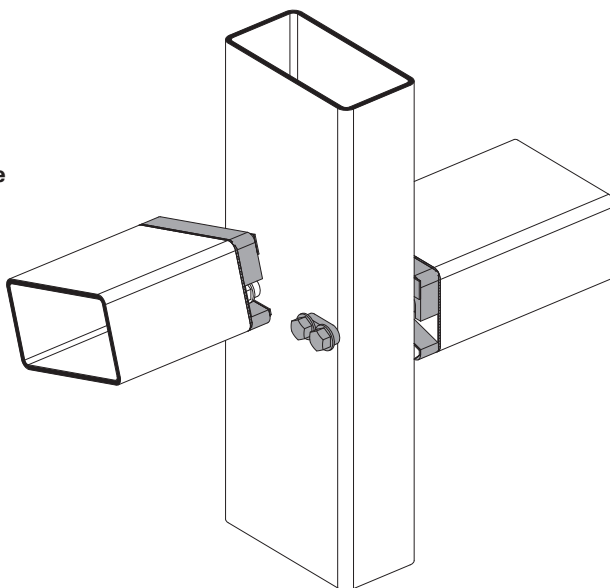


Steckbauweise mit  
 Schwerlast T-Verbinder  
 einhängbar

Méthode de construction  
 modulaire avec  
 raccord en T charge lourde  
 à suspendre

Push-on construction  
 with heavy-duty clip-in  
 connecting spigot

Costruzione modulare  
 con raccordo a T per  
 carichi elevati ad incastro



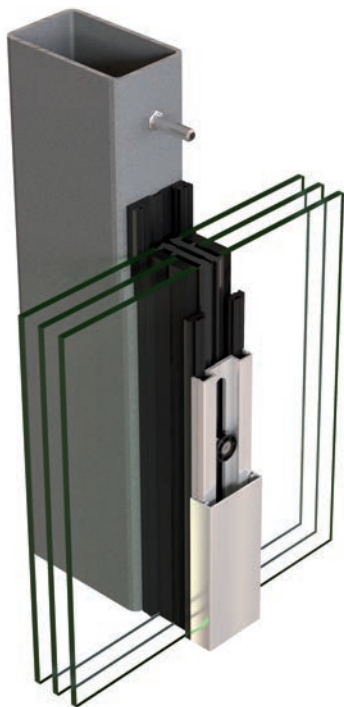
- ① = Montageablauf / Bauablauf  
 = Déroulement du montage / déroulement de la construction  
 = Installation sequence / construction sequence  
 = sequenza delle operazioni di montaggio / costruzione

*Der Universal T-Verbinder ist bei folgenden VISS Basic Systemen einsetzbar:*

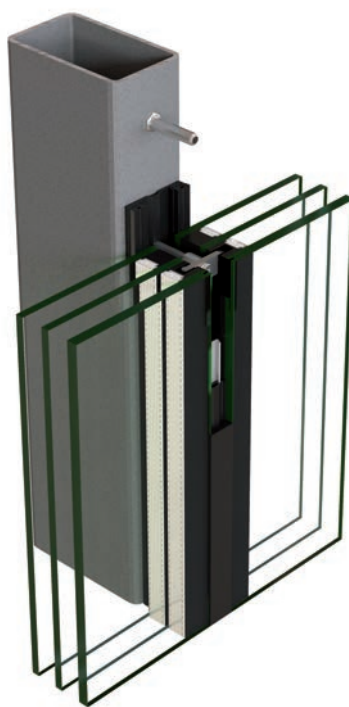
*The universal connecting spigot can be used in the following VISS Basic systems:*

*Le raccord en T universel est utilisable sur les systèmes VISS Basic suivants:*

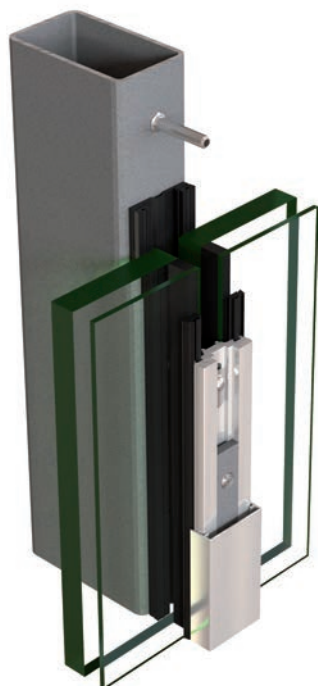
*Il raccordo a T universale può essere utilizzato con i seguenti sistemi VISS Basic:*



VISS Basic



VISS Basic SG / VISS Basic Semi SG



VISS Basic RC

**Einsatzbereich:**  
**Tragkonstruktion raumseitig angeordnet.**  
**Nur für Innenbereiche trocken, ohne Feuchtigkeitsbelastung.**

**Area of application:**  
**Load-bearing structure arranged on the room side.**  
**For internal use in dry areas only, with no moisture.**

**Ablaufschritte:**  
**Tragkonstruktion mit Universal T-Verbinder**

|                                        | Seite |
|----------------------------------------|-------|
| 1. Konstruktionen                      | 8     |
| 2. Verarbeitungshilfen                 | 10    |
| 3. Füllelementgewichte / Tragfähigkeit | 11    |
| 4. Verarbeitung                        | 13    |
| 5. Oberflächenbehandlung               | 14    |
| 6. Bohrbild für CNC-Programmierung     | 16    |

**Process steps:**  
**Load-bearing structure with universal connecting spigot**

|                                              | Page |
|----------------------------------------------|------|
| 1. Constructions                             | 8    |
| 2. Assembly tools                            | 10   |
| 3. Infill unit weights/load-bearing capacity | 11   |
| 4. Processing                                | 13   |
| 5. Surface treatment                         | 14   |
| 6. Drilling pattern for CNC programming      | 16   |

**Domaine d'utilisation:**  
**Construction porteuse disposée côté intérieur.**  
**Uniquement pour utilisation en intérieur à sec, sans humidité.**

**Campo di impiego:**  
**Costruzione portante applicata sul lato interno.**  
**Solo per ambienti asciutti, senza umidità.**

**Étapes du déroulement:**  
**Construction porteuse avec raccord en T universel**

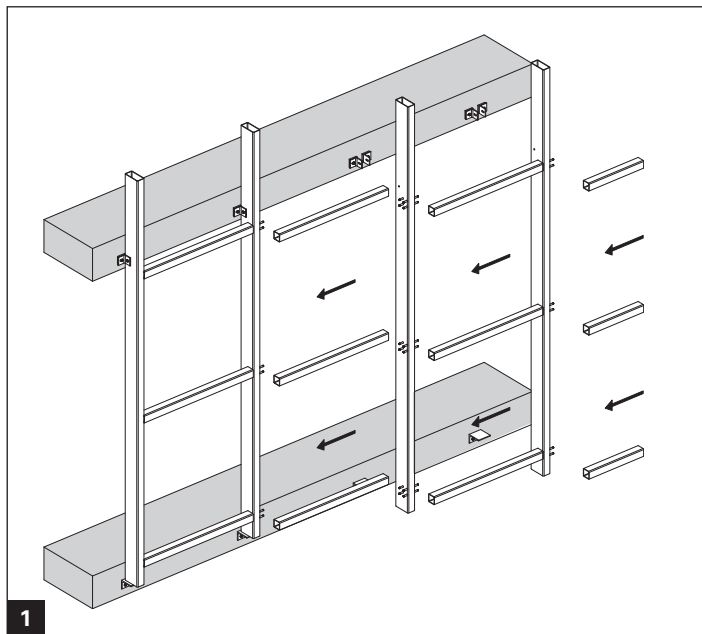
|                                             | Page |
|---------------------------------------------|------|
| 1. Constructions                            | 8    |
| 2. Outils d'usinage                         | 10   |
| 3. Poids de remplissage / charge admissible | 11   |
| 4. Usinage                                  | 13   |
| 5. Traitement de surface                    | 14   |
| 6. Schéma de perçage pour programmation CNC | 16   |

**Sequenza delle operazioni:**  
**Costruzione portante con raccordo a T universale**

|                                                           | Pagina |
|-----------------------------------------------------------|--------|
| 1. Tipologie di costruzione                               | 8      |
| 2. Attrezzatura per il montaggio                          | 10     |
| 3. Pesi degli elementi di riempimento / capacità portante | 11     |
| 4. Lavorazione                                            | 13     |
| 5. Trattamento superficiale                               | 14     |
| 6. Piano di foratura per la programmazione CNC            | 16     |

## Konstruktionen

### Constructions



Steckbauweise

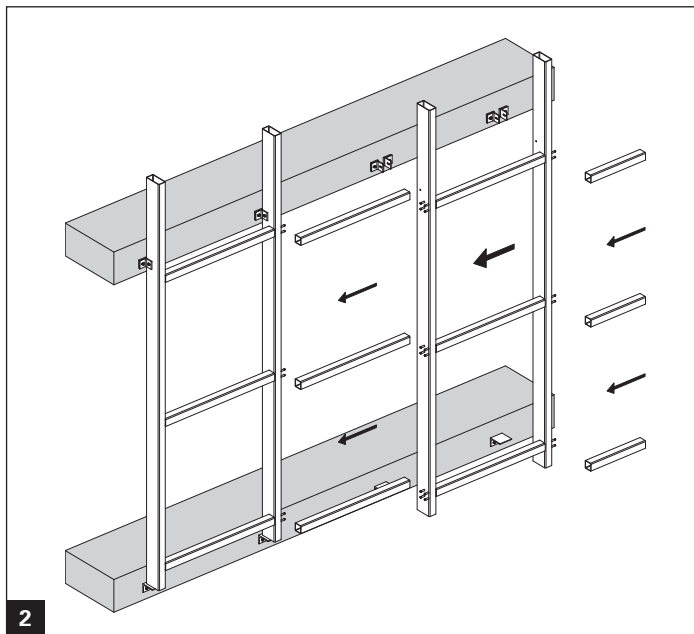
Méthode de construction modulaire

Push-ont construction

Costruzione modulare

## Constructions

### Tipologie di costruzione

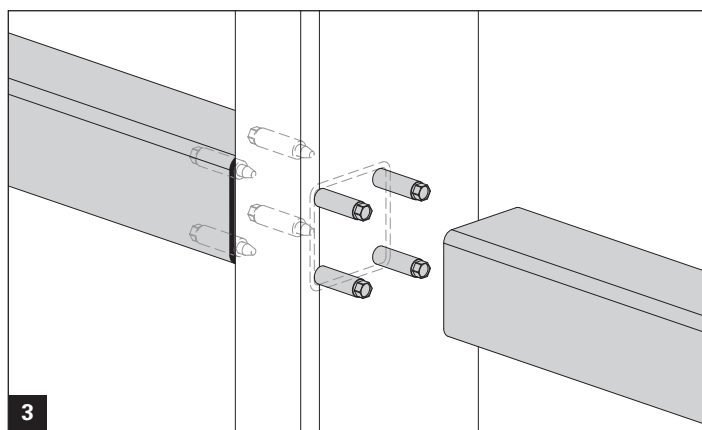


Rahmenbauweise / Steckbauweise

Construction par éléments / construction modulaire

Unitised construction / Push-fon construction

Costruzione a elementi / costruzione modulare



Riegel gesteckt

Traverse emboîtée

Slide-on transom

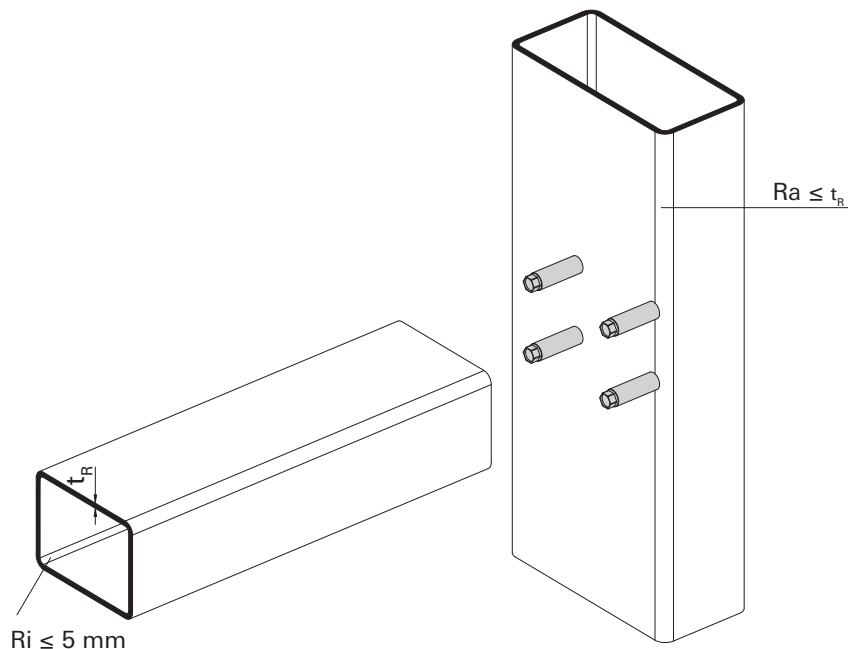
Traverso a innesto

*Standardausführung: Riegel gesteckt*

*Modèle standard: Traverse emboîtée*

*Standard model: Slide-on transom*

*Versione standard: traverso a innesto*



#### VISS Basic

Hohlprofil  
(Pfosten  $Ri \leq 2$  mm / Riegel  $Ri \leq 5$  mm)

Profilé creux  
(Montant  $Ri \leq 2$  mm/Traverse  $Ri \leq 5$  mm)

Hollow profile  
(Mullion  $Ri \leq 2$  mm/Transom  $Ri \leq 5$  mm)

Profilo cavo  
(Montante  $Ri \leq 2$  mm/Traverso  $Ri \leq 5$  mm)

#### VISS I<sub>x</sub>tra

Kastenprofil scharfkantig

Profilé de boîte angle vif

Box profile sharp-edged

Profilo scatolato ad angoli vivi

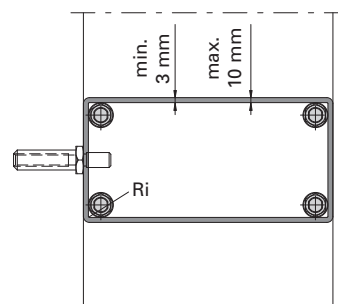
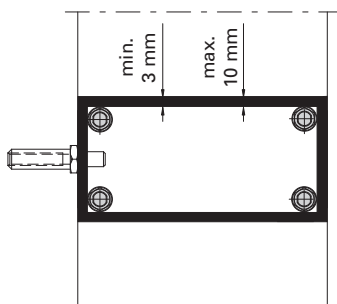
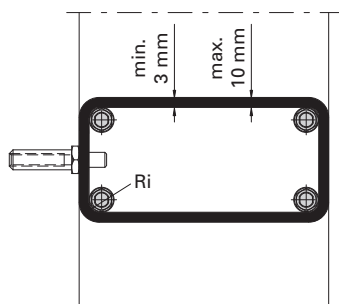
#### VISS Basic

Edelstahl  
(Pfosten  $Ri \leq 2$  mm/Riegel  $Ri \leq 5$  mm)

Acier Inox  
(Montant  $Ri \leq 2$  mm/Traverse  $Ri \leq 5$  mm)

Stainless steel  
(Mullion  $Ri \leq 2$  mm/Transom  $Ri \leq 5$  mm)

Acciaio inox  
(Montante  $Ri \leq 2$  mm/Traverso  $Ri \leq 5$  mm)



Universal T-Verbinder  
Raccord en T universel  
Universal connecting spigot  
Raccordo a T universale

VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic

**Verarbeitungshilfen**

**Outils d'usinage**

**Assembly tools**

**Attrezzatura per il montaggio**



**499.234**

**Tiefenanschlag**

Stahl verzinkt, für Bohrer  
Ø 5,3 mm, optional  
beim Bohren mittels  
Handbohrmaschine

VE = 1 Stück

**499.234**

**Butée**

acier galvanisé, pour  
foret Ø 5,3 mm, en  
option pour perçage  
avec perceuse manuelle

UV = 1 pièce

**499.234**

**Depth stop**

galvanised steel, for  
drill bit Ø 5.3 mm,  
optional when using  
a hand-held drill

PU = 1 piece

**499.234**

**Battuta di profondità**

acciaio zincato, per  
punte da Ø 5,3 mm,  
opzionale per foratura  
con trapano a mano

UV = 1 pezzo



**499.395**

**Schraubenadapter**

Stahl verzinkt, zur  
rationellen Montage  
der Bolzen

VE = 1 Stück

**499.395**

**Adaptateur à vis**

acier galvanisé, pour le  
montage rationnel des  
goujons

UV = 1 pièce

**499.395**

**Screw adapter**

galvanised steel, for  
screwing-in the bolt  
sleeve

PU = 1 piece

**499.395**

**Adattatore per viti**

acciaio zincato, per il  
montaggio razionale  
dei bulloni

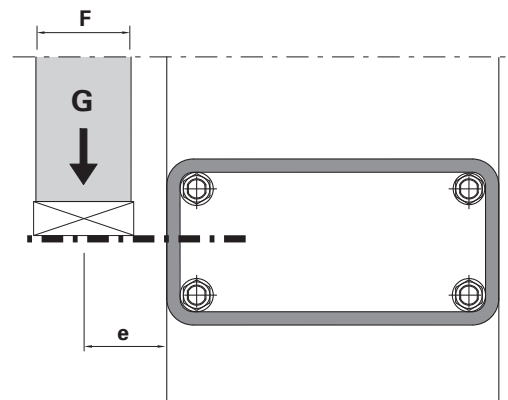
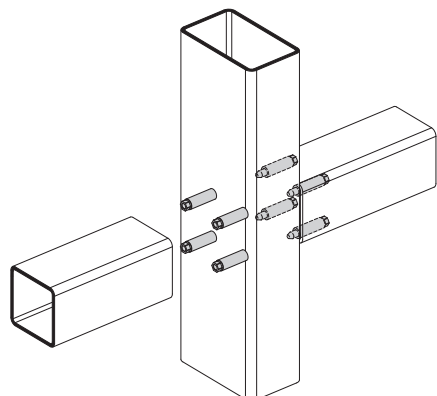
UV = 1 pezzo

**Füllelementgewichte / Tragfähigkeit (G)**

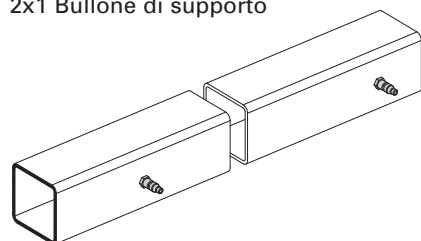
**Poids de remplissage / Charge admissible (G)**

**Weight of infill elements / Load capacity (G)**

**Peso elemento di riempimento / Capacità portante (G)**

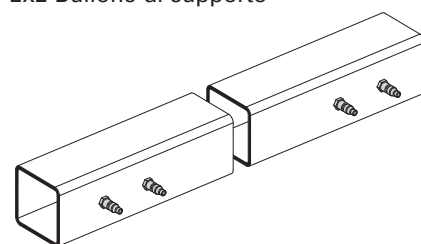


2x1 Traganker  
 2x1 Boulons-supports  
 2x1 Supporting bolts  
 2x1 Bullone di supporto



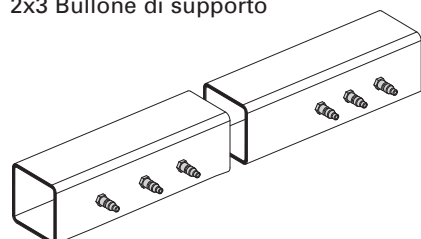
|        |    | 50 mm                                             |         | 60 mm                                             |         |
|--------|----|---------------------------------------------------|---------|---------------------------------------------------|---------|
| F      | e  | Dimension<br>Dimension<br>Dimension<br>Dimensione | G       | Dimension<br>Dimension<br>Dimension<br>Dimensione | G       |
| mm     | mm |                                                   |         |                                                   |         |
| 6 - 40 | 30 | min. 50/50/3 mm                                   | 0,75 kN | min. 60/50/3 mm                                   | 0,75 kN |

2x2 Traganker  
 2x2 Boulons-supports  
 2x2 Supporting bolts  
 2x2 Bullone di supporto



|        |    | 50 mm                                             |        | 60 mm                                             |        |
|--------|----|---------------------------------------------------|--------|---------------------------------------------------|--------|
| F      | e  | Dimension<br>Dimension<br>Dimension<br>Dimensione | G      | Dimension<br>Dimension<br>Dimension<br>Dimensione | G      |
| mm     | mm |                                                   |        |                                                   |        |
| 6 - 40 | 30 | min. 50/50/3 mm                                   | 1,5 kN | min. 60/50/3 mm                                   | 1,5 kN |

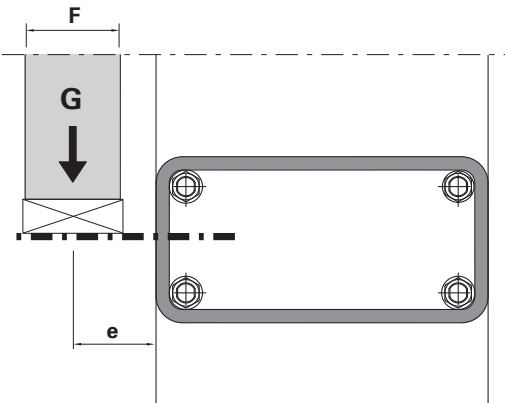
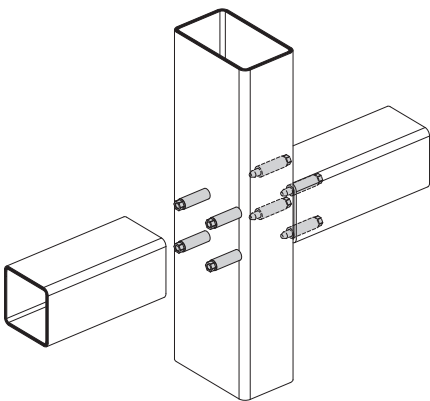
2x3 Traganker  
 2x3 Boulons-supports  
 2x3 Supporting bolts  
 2x3 Bullone di supporto



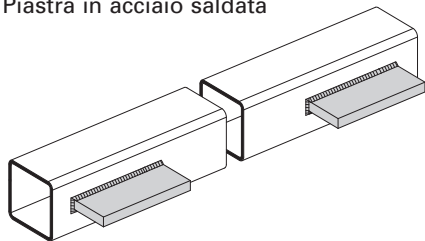
|        |    | 50 mm                                             |        | 60 mm                                   |        |
|--------|----|---------------------------------------------------|--------|-----------------------------------------|--------|
| F      | e  | Dimension<br>Dimension<br>Dimension<br>Dimensione | G      | Profil<br>Profilé<br>Profile<br>Profilo | G      |
| mm     | mm |                                                   |        |                                         |        |
| 6 - 40 | 30 | min. 50/50/3 mm                                   | 2,5 kN | min. 60/50/3 mm                         | 2,5 kN |
|        |    | min. 50/80/3 mm                                   | 3 kN   | min. 60/80/3 mm                         | 3 kN   |

Universal T-Verbinder  
Raccord en T universel  
Universal connecting spigot  
Raccordo a T universale

VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic



Flachstahl eingeschweisst  
Acier plat soudé  
Flat steel welding  
Piastra in acciaio saldata



|         |      | 50 mm                                                                 |         | 60 mm                                                                 |         |
|---------|------|-----------------------------------------------------------------------|---------|-----------------------------------------------------------------------|---------|
| F       | e    | Min. Dimension<br>Dimension min.<br>Min. dimension<br>Min. dimensione | G       | Min. Dimension<br>Dimension min.<br>Min. dimension<br>Min. dimensione | G       |
| mm      | mm   |                                                                       |         |                                                                       |         |
| 6 - 24  | 22   | 50/50/3                                                               | 3 kN    | 60/50/3                                                               | 3 kN    |
|         |      | 50/60/3                                                               | 3 kN    | 60/80/3                                                               | 4 kN    |
|         |      | 50/80/3                                                               | 4 kN    | 60/100/3                                                              | 6 kN    |
|         |      | 50/95/3                                                               | 5 kN    | 60/120/3                                                              | 7 kN    |
|         |      | 50/120/3                                                              | 7 kN    | 60/150/3                                                              | 8 kN    |
|         |      | 50/140/3                                                              | 7 kN    |                                                                       |         |
| 25 - 39 | 29,5 | 50/50/3                                                               | 2,75 kN | 60/50/3                                                               | 2,75 kN |
|         |      | 50/60/3                                                               | 2,75 kN | 60/80/3                                                               | 3,5 kN  |
|         |      | 50/80/3                                                               | 3,5 kN  | 60/100/3                                                              | 5 kN    |
|         |      | 50/95/3                                                               | 4,5 kN  | 60/120/3                                                              | 6 kN    |
|         |      | 50/120/3                                                              | 6 kN    | 60/150/3                                                              | 7 kN    |
|         |      | 50/140/3                                                              | 6 kN    |                                                                       |         |
| 40 - 54 | 37   | 50/50/3                                                               | 2,5 kN  | 60/50/3                                                               | 2,5 kN  |
|         |      | 50/60/3                                                               | 2,5 kN  | 60/80/3                                                               | 3 kN    |
|         |      | 50/80/3                                                               | 3 kN    | 60/100/3                                                              | 4 kN    |
|         |      | 50/95/3                                                               | 4 kN    | 60/120/3                                                              | 4,5 kN  |
|         |      | 50/120/3                                                              | 4,5 kN  | 60/150/3                                                              | 5 kN    |
|         |      | 50/140/3                                                              | 4,5 kN  |                                                                       |         |

**Hinweis:**  
Die maximale Riegeldurchbiegung L/500 darf nicht überschritten werden und jegliche Berührung zwischen Riegel und Füllelement (Ausfachung) muss verhindert werden.

Werden die obigen Füllelementgewichte überschritten, so ist eine Prüfung im Einzelfall erforderlich.

**Remarque:**  
Le flambage maximal de la traverse L/500 ne doit pas être dépassé et tout contact entre traverse et élément de remplissage (boulons-support et supports de vitrage) doit être empêché.

Si les poids de remplissage indiqués ci-dessus sont dépassés, un contrôle du cas particulier sera nécessaire.

**Note:**  
The maximum transom deflection L/500 must not be exceeded and any contact between transom and infill unit (infill) must be prevented.

If the above infill unit weights are exceeded, an individual test is required.

**Nota:**  
Non deve essere superata il valore massimo di flessione del traverso L/500 ed è necessario evitare qualsiasi contatto fra il traverso e l'elemento di riempimento (tamponamento).

Qualora i pesi degli elementi di riempimento riportati sopra vengano superati, sarà necessaria una verifica caso per caso.

## Verarbeitung

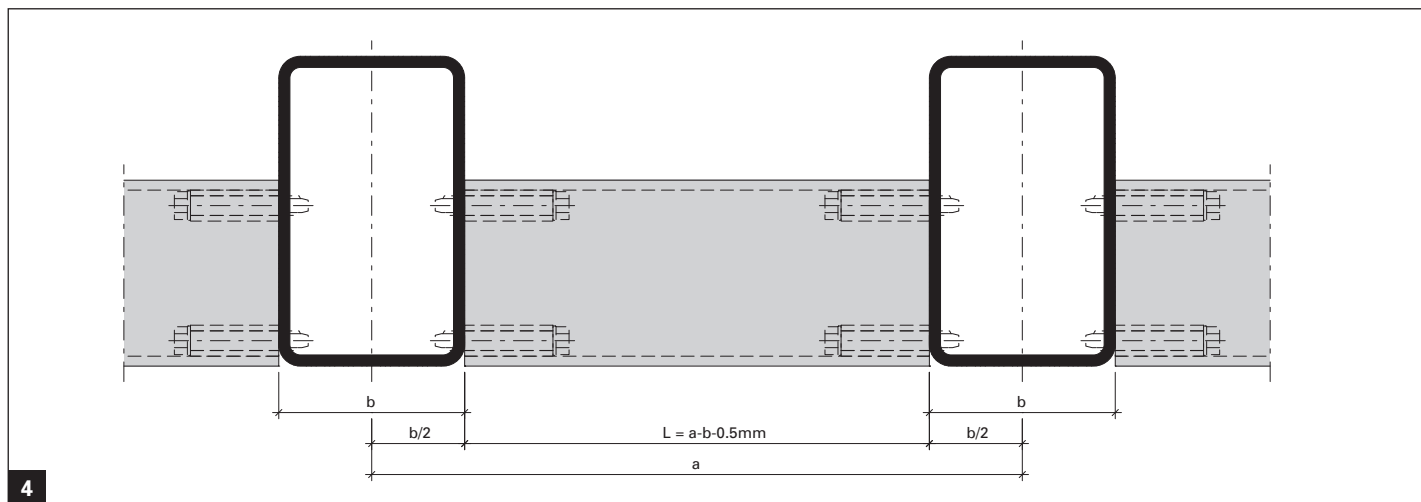
### Usinage

1. Zuschnitt Riegel
1. Découpe traverse

## Processing

### Lavorazione

1. Transom cutting
1. Taglio dei traversi



Länge Riegel  $L = a - b$

$a$  = Achsmass  
 $b$  = Profilbreite  
 $L$  = Riegellänge

Longueur traverse  $L = a - b$

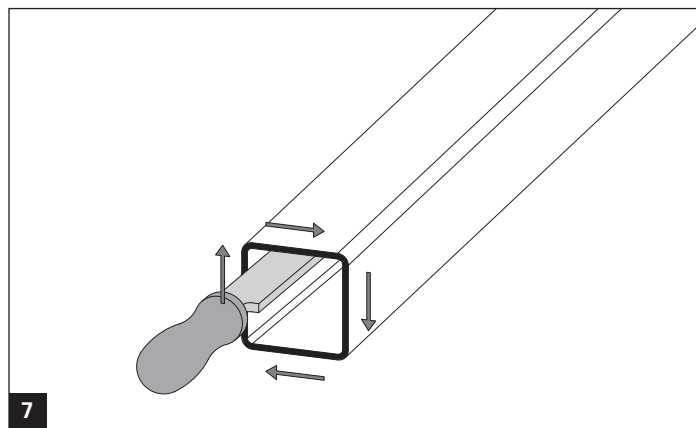
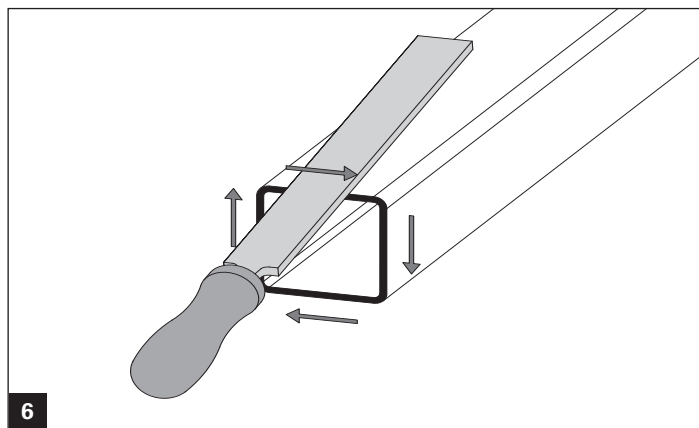
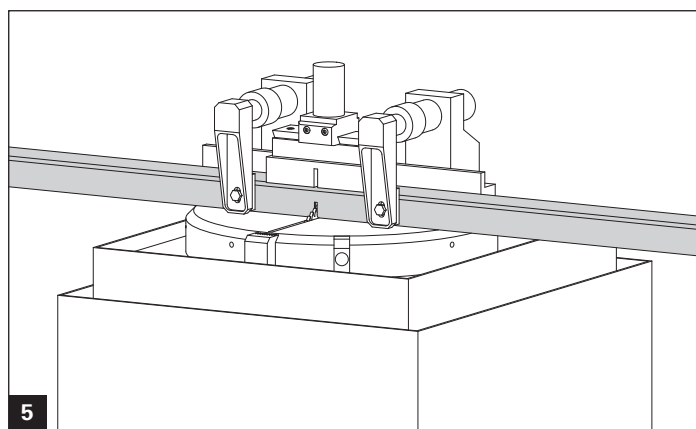
$a$  = Entraxe  
 $b$  = Largeur du profilé  
 $L$  = Longueur de la traverse

Length of transom  $L = a - b$

$a$  = Axis dimension  
 $b$  = Profile width  
 $L$  = Transom length

Lunghezza traverso  $L = a - b$

$a$  = Interasse  
 $b$  = Larghezza profilo  
 $L$  = Lunghezza traverso



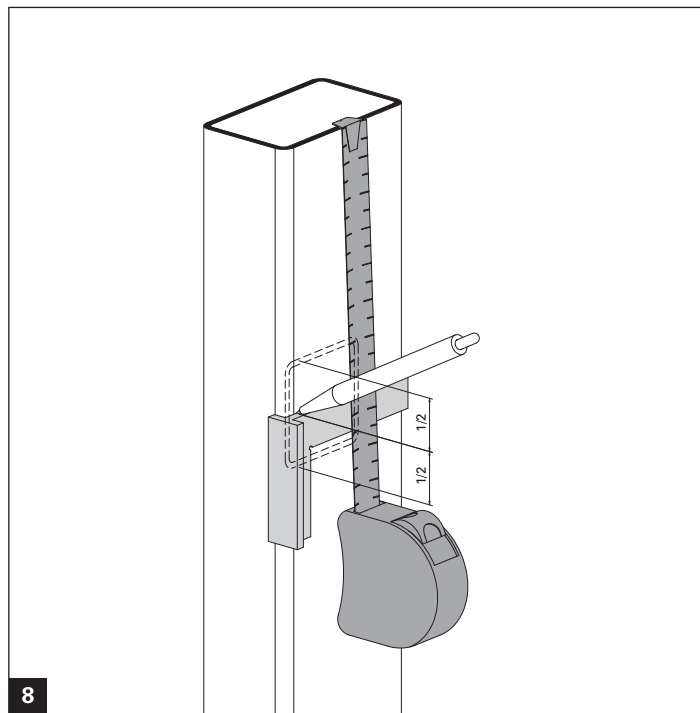
### **Oberflächenbehandlung Tragkonstruktion**

Nachdem die Pfosten und Riegel der Tragkonstruktion in der Werkstatt fertig erstellt sind, ist die Oberflächenbehandlung vorzunehmen.

### **Traitement de la surface de la construction porteuse**

Il doit être procédé au traitement de surface quand les montants et traverses de la construction porteuse ont été réalisés à l'atelier.

- 2. Montage
- 2. Montage



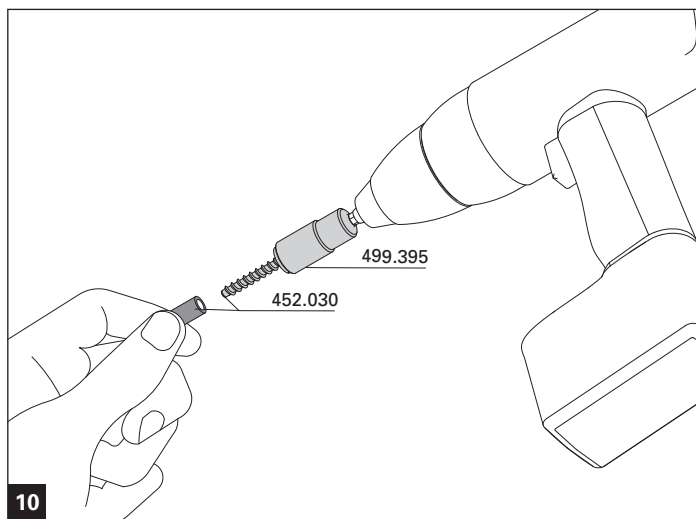
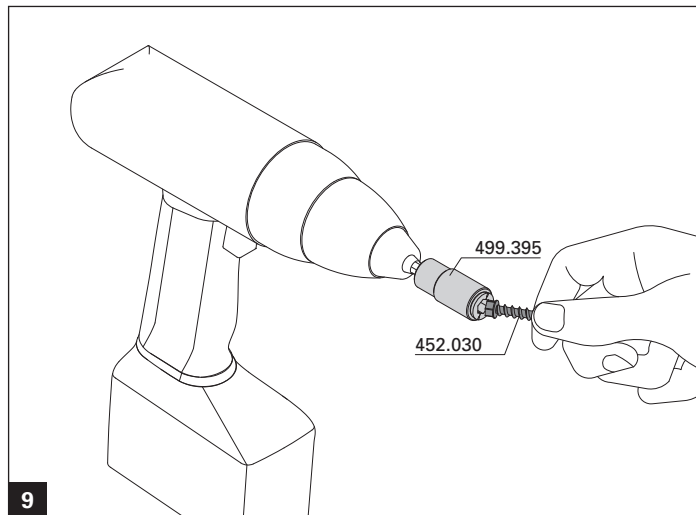
### **Surface treatment of the load-bearing structure**

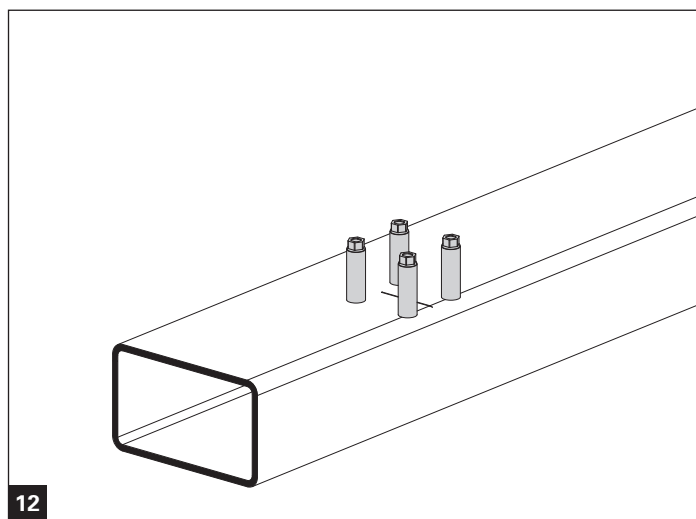
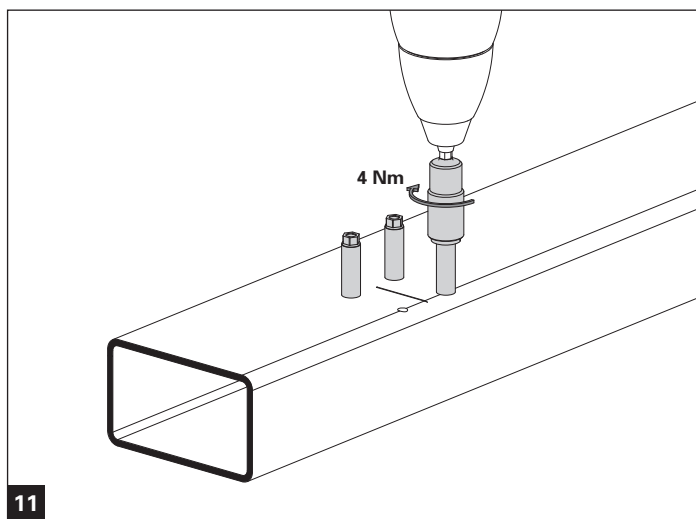
After the mullion and transom of the load-bearing structure have been completed in the workshop, the surface treatment is to be applied.

### **Trattamento superficiale della struttura portante**

Una volta che i montanti e i traversi della struttura portante sono stati realizzati in officina, è necessario provvedere al loro trattamento superficiale.

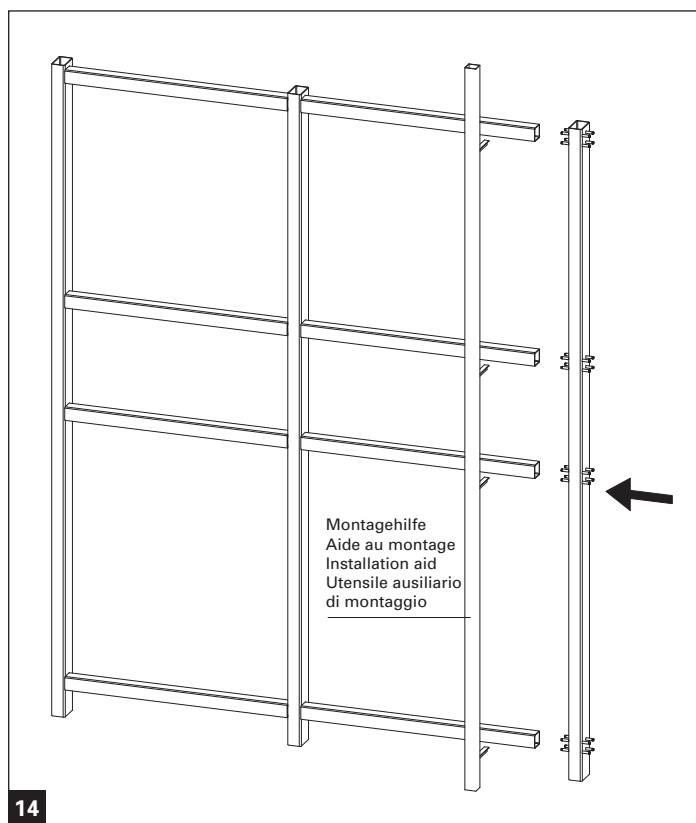
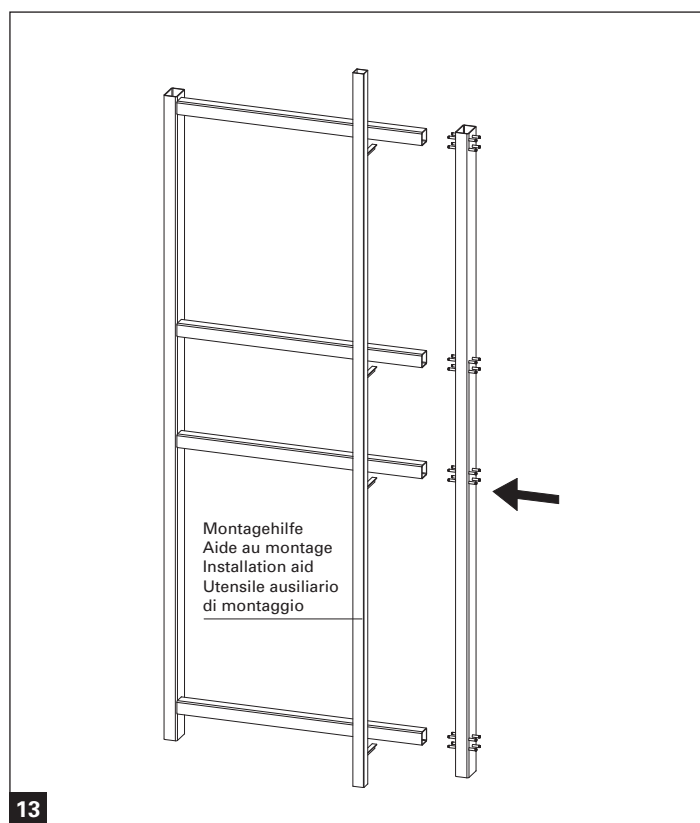
- 2. Assembly
- 2. Montaggio





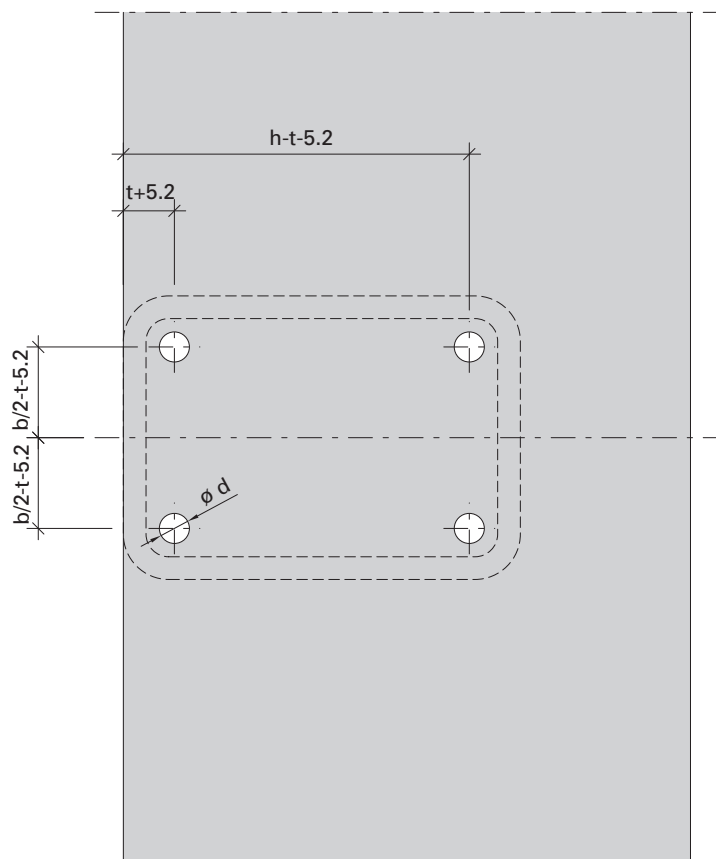
3. Montage Pfosten/Riegel  
 3. Montage montant/traverse

3. Mullion/transom assembly  
 3. Montaggio montante/traverso



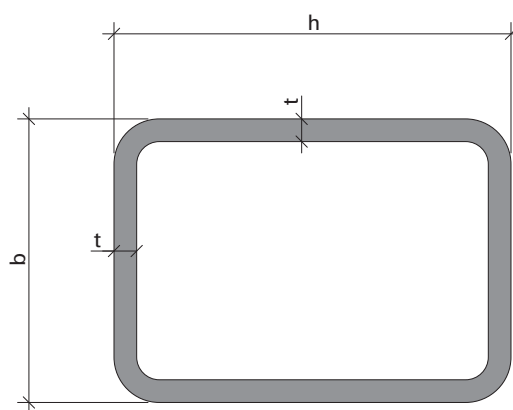
**Bohrbild für CNC-Programmierung**

**Schéma de perçage pour programmation CNC**



**Drilling pattern for CNC programming**

**Piano di foratura per la programmazione CNC**



h = Profiltiefe  
b = Ansichtsbreite / Profilhöhe  
t = Wandstärke  
d = Bohrdurchmesser

h = Profondeur du profilé  
b = Largeur de face / hauteur du profilé  
t = Epaisseur de paroi  
d = Diamètre de perçage

h = Profile depth  
b = Face width / profile height  
t = Wall thickness  
d = Drilling diameter

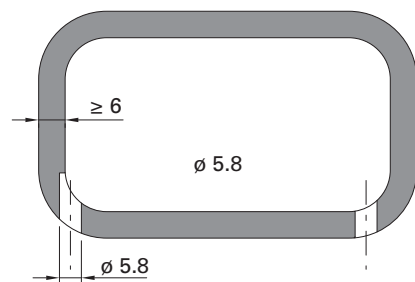
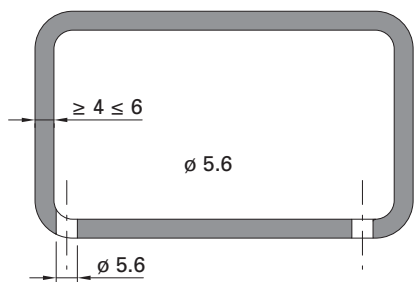
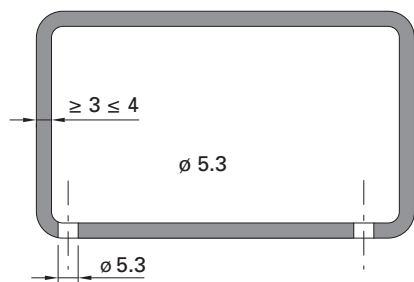
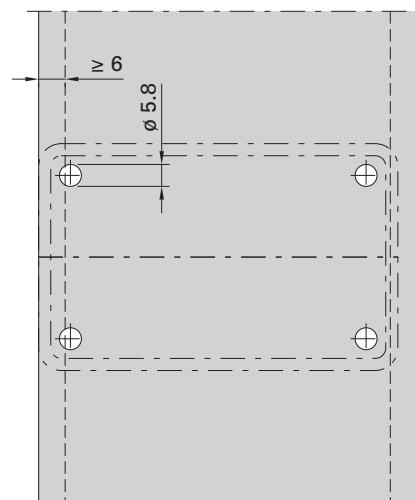
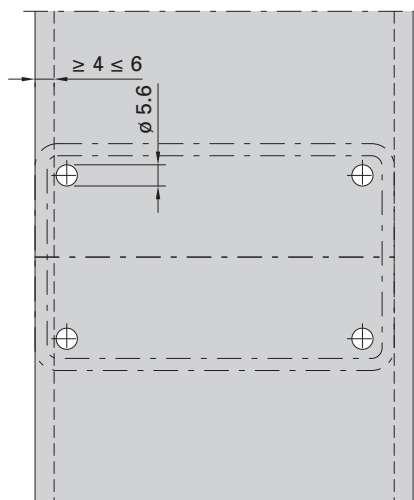
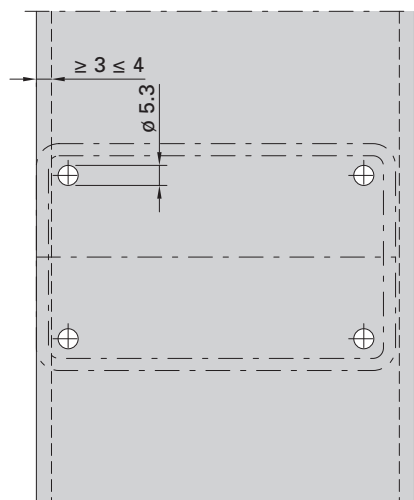
h = Profondità del profilo  
b = Larghezza in vista / altezza del profilo  
t = Spessore della parete  
d = Diametro dei fori

**Bohrdurchmesser (d) in Abhängigkeit der Wandstärke**

**Schéma de perçage pour programmation CNC**

**Drilling pattern for CNC programming**

**Piano di foratura per la programmazione CNC**



Schwerlast T-Verbinder einhängbar  
Raccord en T charge lourde à suspendre  
Heavy-duty clip-in connecting spigot  
Raccordo a T per carichi elevati ad incastro

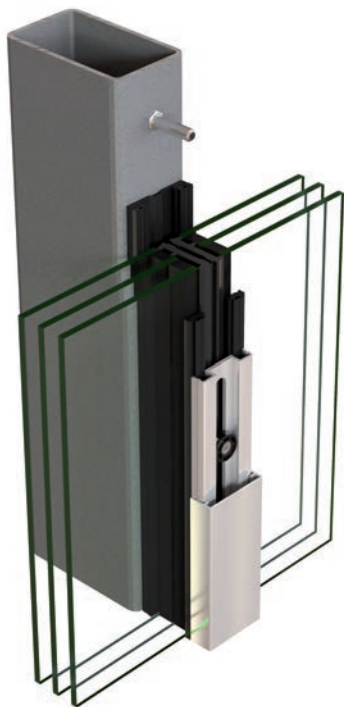
VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic

*Der Schwerlast T-Verbinder einhängbar ist bei folgenden VISS Basic Systemen einsetzbar:*

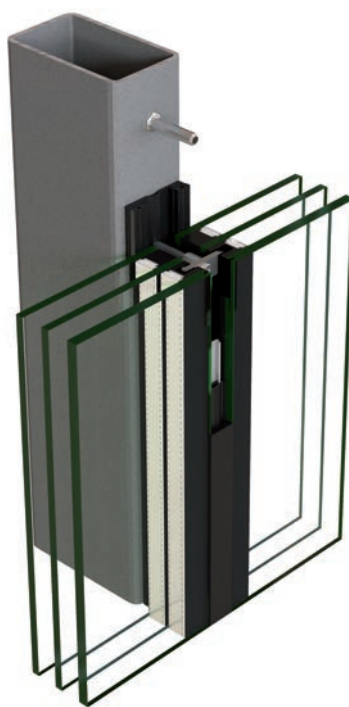
*Le raccord en T charge lourde à suspendre est utilisable sur les systèmes VISS Basic suivants:*

*The heavy-duty clip-in connecting spigot can be used in the following VISS Basic systems:*

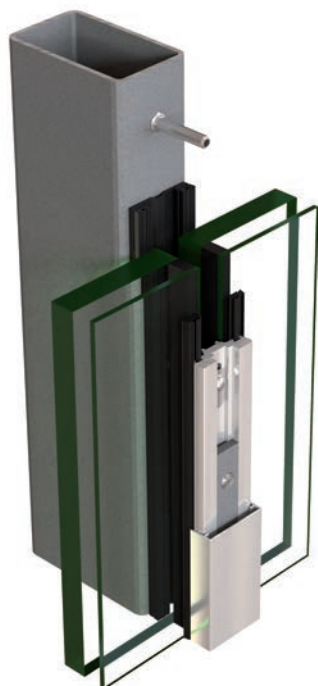
*Il raccordo a T per carichi elevati ad incastro può essere utilizzato con i seguenti sistemi VISS Basic:*



VISS Basic



VISS Basic SG / VISS Basic Semi SG



VISS Basic RC

**Einsatzbereich:**  
**Tragkonstruktion raumseitig angeordnet.**  
**Nur für Innenbereiche trocken, ohne Feuchtigkeitsbelastung.**

**Area of application:**  
**Load-bearing structure arranged on the room side.**  
**For internal use in dry areas only, with no moisture.**

**Ablaufschritte:**  
**Tragkonstruktion mit Schwerlast T-Verbinder einhängbar**

**Process steps: Load-bearing structure with heavy-duty clip-in connecting spigot**

|                                        | Seite |
|----------------------------------------|-------|
| 1. Konstruktionen                      | 20    |
| 2. Verarbeitungshilfen                 | 21    |
| 3. Füllelementgewichte / Tragfähigkeit | 22    |
| 4. Verarbeitung                        | 24    |
| 5. Oberflächenbehandlung               | 26    |
| 6. Bohrbild für CNC-Programmierung     | 29    |

|                                              | Page |
|----------------------------------------------|------|
| 1. Constructions                             | 20   |
| 2. Assembly tools                            | 21   |
| 3. Infill unit weights/load-bearing capacity | 22   |
| 4. Processing                                | 24   |
| 5. Surface treatment                         | 26   |
| 6. Drilling pattern for CNC programming      | 29   |

**Domaine d'utilisation:**  
**Construction porteuse disposée côté intérieur.**  
**Uniquement pour utilisation en intérieur à sec, sans humidité.**

**Campo di impiego:**  
**Costruzione portante applicata sul lato interno.**  
**Solo per ambienti asciutti, senza umidità.**

**Étapes du déroulement: Construction porteuse avec raccord en T charge lourde à suspendre**

**Sequenza delle operazioni: Struttura portante con raccordo a T per carichi elevati ad incastro**

|                                             | Page |
|---------------------------------------------|------|
| 1. Constructions                            | 20   |
| 2. Outils d'usage                           | 21   |
| 3. Poids de remplissage / charge admissible | 22   |
| 4. Usinage                                  | 24   |
| 5. Traitement de surface                    | 26   |
| 6. Schéma de perçage pour programmation CNC | 29   |

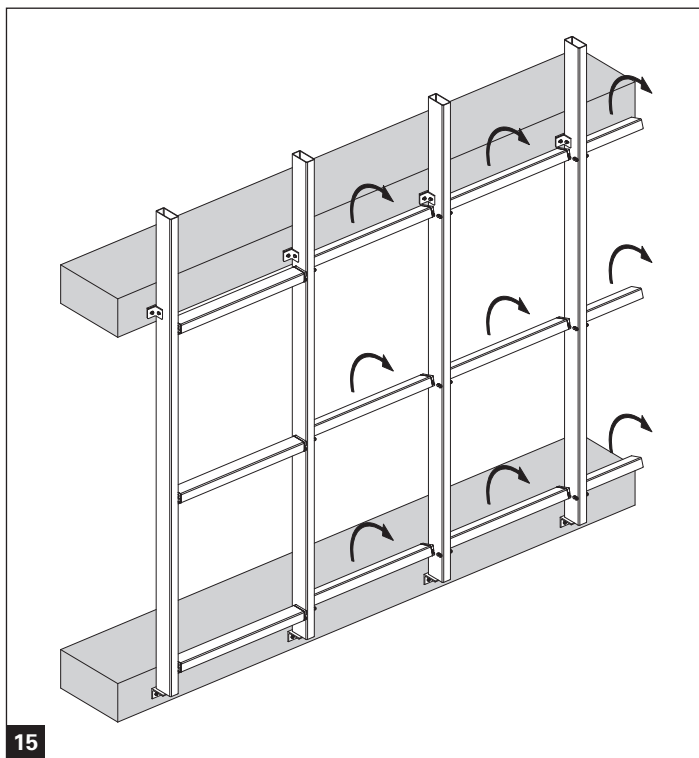
|                                                           | Pagina |
|-----------------------------------------------------------|--------|
| 1. Tipologie di costruzione                               | 20     |
| 2. Attrezzatura per il montaggio                          | 21     |
| 3. Pesi degli elementi di riempimento / capacità portante | 22     |
| 4. Lavorazione                                            | 24     |
| 5. Trattamento superficiale                               | 26     |
| 6. Piano di foratura per la programmazione CNC            | 29     |

**Schwerlast T-Verbinder einhängbar**  
**Raccord en T charge lourde à suspendre**  
**Heavy-duty clip-in connecting spigot**  
**Raccordo a T per carichi elevati ad incastro**

VISS Basic Tragkonstruktion  
 Construction porteuse VISS Basic  
 VISS Basic supporting structure  
 Struttura portante VISS Basic

#### Konstruktionen

#### Constructions



15

Steckbauweise

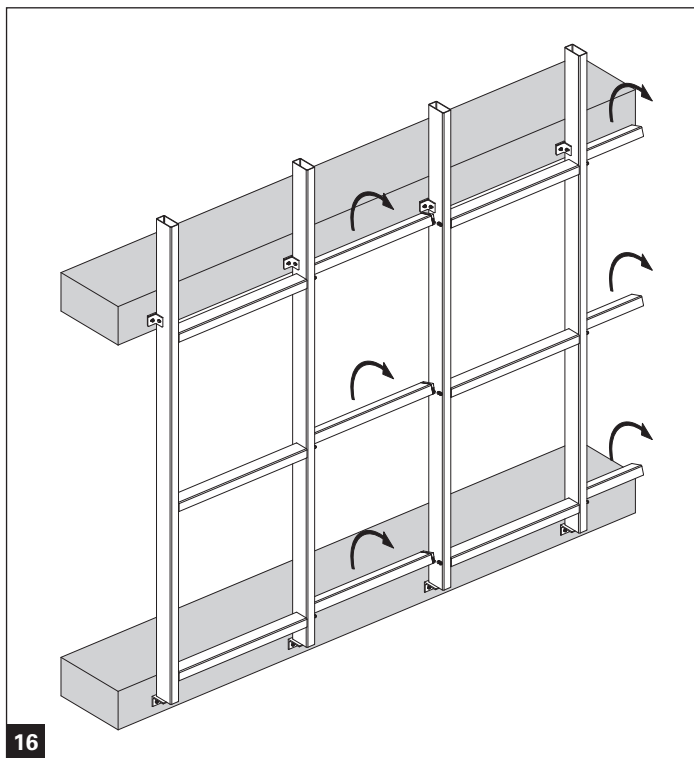
Méthode de construction modulaire

Push-on construction

Costruzione modulare

#### Constructions

#### Tipologie di costruzione



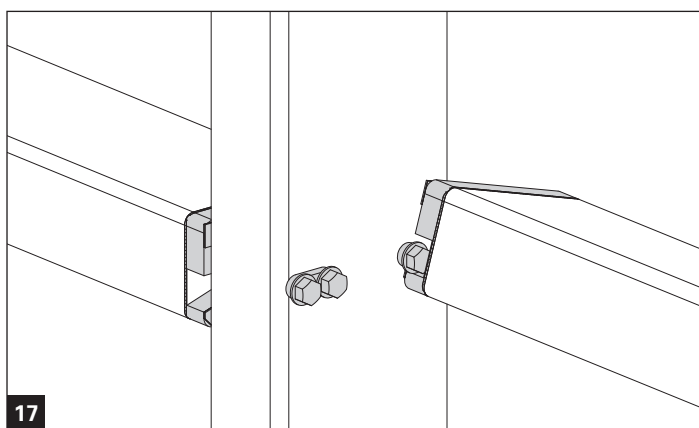
16

Rahmenbauweise / Steckbauweise

Construction par éléments / construction modulaire

Unitised construction / Push-on construction

Costruzione a elementi / costruzione modulare



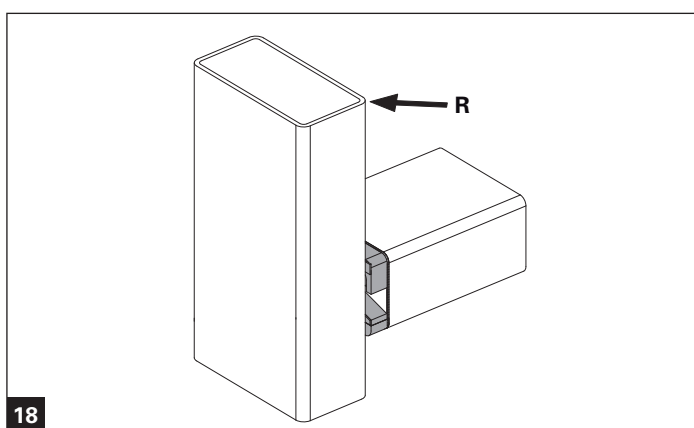
17

Einbausituation Schwerlast T-Verbinder

Situation de montage du raccord en T charge lourde

Installation location of heavy-duty connecting spigot

Montaggio del raccordo a T per carichi elevati



18

Der Kantenradius (R) im Pfostenprofil darf max. 6 mm betragen.

Le rayon d'angle (R) dans le profilé de montant ne doit pas être supérieur à 6 mm.

The edge radius (R) in the mullion profile must be no larger than 6 mm.

Il raggio del bordo (R) del profilo per i montanti può essere di max. 6 mm.

**Schwerlast T-Verbinder einhängbar**  
**Raccord en T charge lourde à suspendre**  
**Heavy-duty clip-in connecting spigot**  
**Raccordo a T per carichi elevati ad incastro**

VISS Basic Tragkonstruktion  
 Construction porteuse VISS Basic  
 VISS Basic supporting structure  
 Struttura portante VISS Basic

#### Verarbeitungshilfen

#### Outils d'usinage

#### Assembly tools

#### Attrezzatura per il montaggio



**499.404** 50 mm  
**499.405** 60 mm

**Bohrplatte**  
 Aluminium,  
 Bohrhülsen ø 7,2 mm

VE = 1 Stück

**499.404** 50 mm  
**499.405** 60 mm

**Plaque de perçage**  
 aluminium, douilles de  
 perçage ø 7,2 mm

UV = 1 pièce

**499.404** 50 mm  
**499.405** 60 mm

**Drilling template**  
 aluminium,  
 drill sleeve ø 7,2 mm

PU = 1 piece

**499.404** 50 mm  
**499.405** 60 mm

**Dima di foratura**  
 alluminio, bussola di  
 foratura ø 7,2 mm

PU = 1 piece



**499.010**  
**Bohrplatte**  
 Aluminium,  
 Bohrhülsen ø 7,2 mm

VE = 1 Stück

**499.010**  
**Plaque de perçage**  
 aluminium, douilles de  
 perçage ø 7,2 mm

UV = 1 pièce

**499.010**  
**Drilling template**  
 aluminium,  
 drill sleeve ø 7,2 mm

PU = 1 piece

**499.010**  
**Dima di foratura**  
 alluminio, bussola di  
 foratura ø 7,2 mm

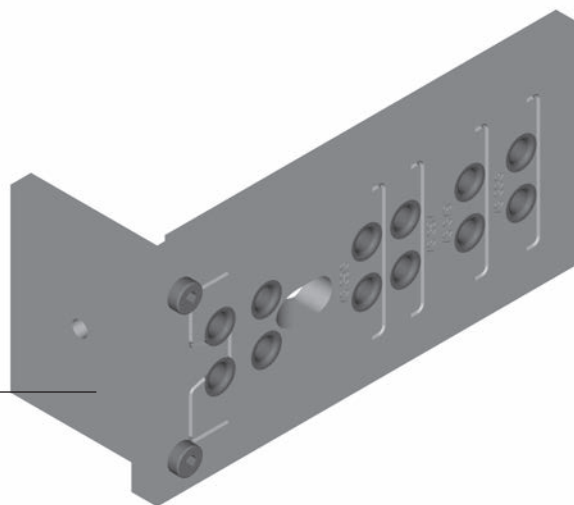
PU = 1 piece

Die Klemmplatte 499.207/499.208 kann in Teilen als Anschlaghilfe verwendet werden.

La plaque de serrage 499.207/499.208 peut servir d'aide au positionnement dans les pièces.

The clamping plate 499.207/499.208 can be used as a stopping aid in places.

La piastra di fissaggio 499.207/499.208 è utilizzabile come guida nei componenti.



**Schwerlast T-Verbinder einhängbar**  
**Raccord en T charge lourde à suspendre**  
**Heavy-duty clip-in connecting spigot**  
**Raccordo a T per carichi elevati ad incastro**

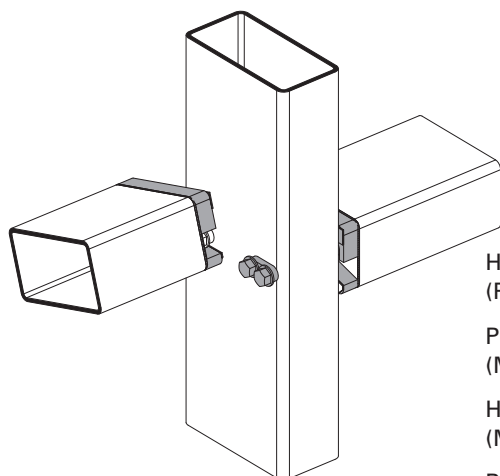
VISS Basic Tragkonstruktion  
 Construction porteuse VISS Basic  
 VISS Basic supporting structure  
 Struttura portante VISS Basic

**Füllelementgewichte / Tragfähigkeit (G)**

**Poids de remplissage / Charge admissible (G)**

**Infill unit weights / Load-bearing capacity (G)**

**Pesi degli elementi di riempimento / Capacità portante (G)**

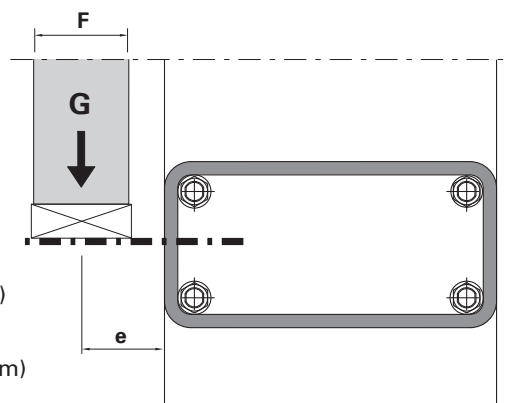


Hohlprofil  
 (Pfosten  $R_i \leq 2$  mm / Riegel  $R_i \leq 5$  mm)

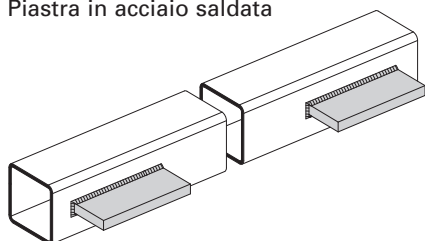
Profilé creux  
 (Montant  $R_i \leq 2$  mm/Traverse  $R_i \leq 5$  mm)

Hollow profile  
 (Mullion  $R_i \leq 2$  mm/Transom  $R_i \leq 5$  mm)

Profilo cavo  
 (Montante  $R_i \leq 2$  mm/Traverso  $R_i \leq 5$  mm)



Flachstahl eingeschweisst  
 Acier plat soudé  
 Flat steel welding  
 Piastra in acciaio saldata



|         |    | 50 mm                                                                 |                                                                                                                          |       |
|---------|----|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------|
| F       | e  | Min. Dimension<br>Dimension min.<br>Min. Dimension<br>Min. Dimensione | Schwerlast-T-Verbinder<br>Raccord en T charge lourde<br>Heavy duty connecting spigot<br>Raccordo a T per carichi elevati | G     |
| 6 - 20  | 20 | 50/80/3                                                               | 452.060                                                                                                                  | 8 kN  |
|         |    | 50/95/3                                                               | 462.061                                                                                                                  | 12 kN |
|         |    | 50/120/3                                                              | 452.062                                                                                                                  | 13 kN |
|         |    | 50/140/3                                                              | 452.063                                                                                                                  | 13 kN |
| 21 - 40 | 30 | 50/80/3                                                               | 452.060                                                                                                                  | 7 kN  |
|         |    | 50/95/3                                                               | 452.061                                                                                                                  | 10 kN |
|         |    | 50/120/3                                                              | 452.062                                                                                                                  | 11 kN |
|         |    | 50/140/3                                                              | 452.063                                                                                                                  | 11 kN |
| 41 - 70 | 45 | 50/80/3                                                               | 452.060                                                                                                                  | 6 kN  |
|         |    | 50/95/3                                                               | 452.061                                                                                                                  | 8 kN  |
|         |    | 50/120/3                                                              | 452.062                                                                                                                  | 9 kN  |
|         |    | 50/140/3                                                              | 452.063                                                                                                                  | 9 kN  |

#### Hinweis:

Die maximale Riegeldurchbiegung  $L/500$  darf nicht überschritten werden und jegliche Berührung zwischen Riegel und Füllelement (Ausfachung) muss verhindert werden.

Werden die obigen Füllelementgewichte überschritten, so ist eine Prüfung im Einzelfall erforderlich.

Auf Anfrage können objektspezifische alternative Abmessungen gefertigt werden.

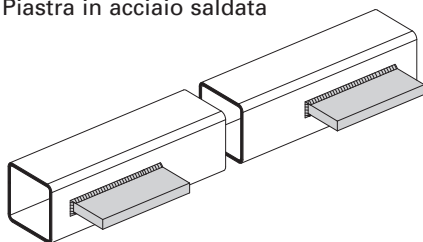
#### Note:

The maximum transom deflection  $L/500$  must not be exceeded and any contact between transom and infill unit (infill) must be prevented.

If the above infill unit weights are exceeded, an individual test is required.

Project-specific, alternative dimensions can be fabricated on request.

Flachstahl eingeschweisst  
Acier plat soudé  
Flat steel welding  
Piastra in acciaio saldata



|         |    | 60 mm                                                                 |                                                                                                                          |       |
|---------|----|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------|
| F       | e  | Min. Dimension<br>Dimension min.<br>Min. Dimension<br>Min. Dimensione | Schwerlast-T-Verbinder<br>Raccord en T charge lourde<br>Heavy duty connecting spigot<br>Raccordo a T per carichi elevati | G     |
| mm      | mm |                                                                       |                                                                                                                          |       |
| 6 - 20  | 20 | 60/80/3                                                               | 452.070                                                                                                                  | 12 kN |
|         |    | 60/100/3                                                              | 462.071                                                                                                                  | 14 kN |
|         |    | 60/120/3                                                              | 452.072                                                                                                                  | 15 kN |
|         |    | 60/150/3                                                              | 452.073                                                                                                                  | 18 kN |
| 21 - 40 | 30 | 60/80/3                                                               | 452.070                                                                                                                  | 10 kN |
|         |    | 60/100/3                                                              | 452.071                                                                                                                  | 12 kN |
|         |    | 60/120/3                                                              | 452.072                                                                                                                  | 13 kN |
|         |    | 60/150/3                                                              | 452.073                                                                                                                  | 14 kN |
| 41 - 70 | 45 | 60/80/3                                                               | 452.070                                                                                                                  | 8 kN  |
|         |    | 60/100/3                                                              | 452.071                                                                                                                  | 10 kN |
|         |    | 60/120/3                                                              | 452.072                                                                                                                  | 11 kN |
|         |    | 60/150/3                                                              | 452.073                                                                                                                  | 12 kN |

**Remarque:**

Le flambage maximal de la traverse L/500 ne doit pas être dépassé et tout contact entre traverse et élément de remplissage (boulons-support et supports de vitrage) doit être empêché.

Si les poids de remplissage indiqués ci-dessus sont dépassés, un contrôle du cas particulier sera nécessaire.

D'autres dimensions spécifiques à un objet sont possibles sur demande.

**Nota:**

Non deve essere superata il valore massimo di flessione del traverso L/500 ed è necessario evitare qualsiasi contatto fra il traverso e l'elemento di riempimento (tamponamento).

Qualora i pesi degli elementi di riempimento riportati sopra vengano superati, sarà necessaria una verifica caso per caso.

Su richiesta è possibile fornire misure alternative specifiche per l'edificio in questione.

Schwerlast T-Verbinder einhängbar  
Raccord en T charge lourde à suspendre  
Heavy-duty clip-in connecting spigot  
Raccordo a T per carichi elevati ad incastro

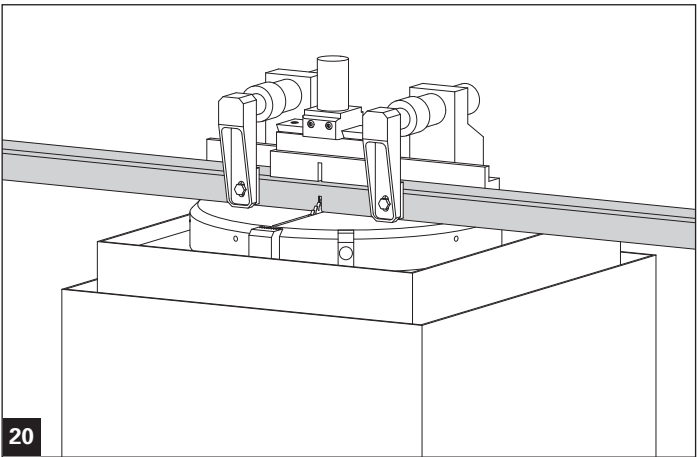
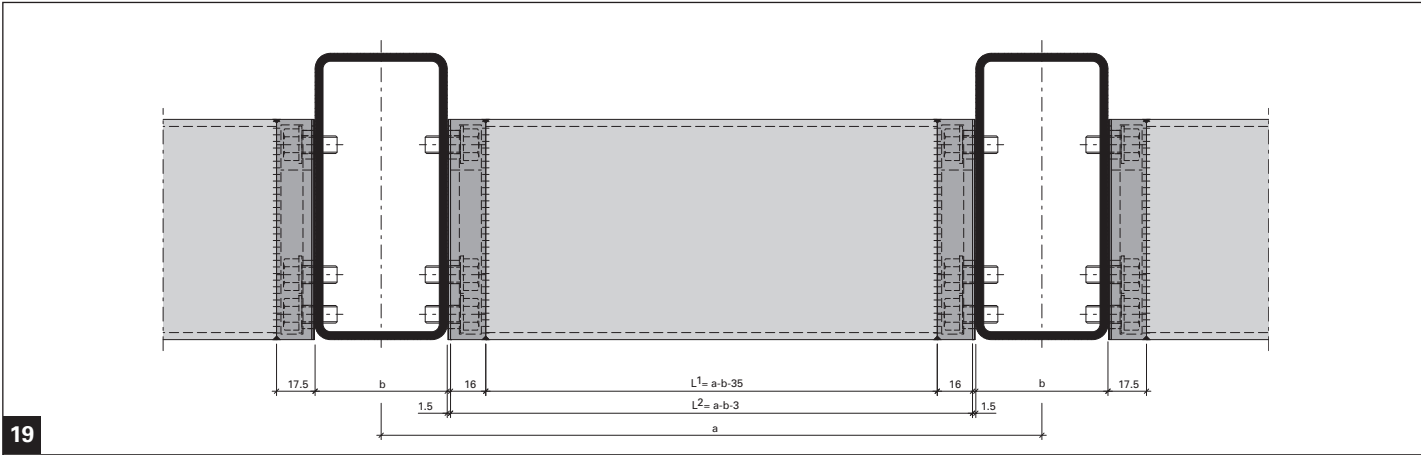
VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic

Verarbeitung  
Usinage

- 1. Zuschnitt Riegel
- 1. Découpe traverse

Processing  
Lavorazione

- 1. Transom cutting
- 1. Taglio dei traversi



Riegellänge ohne T-Verbinder  
Riegellänge mit T-Verbinder  
a = Achsmass  
b = Profilbreite

Longueur traverse sans raccord en T  
Longueur traverse avec raccord en T  
a = Entraxe  
b = Largeur du profilé

Transom length without connecting spigot  
Transom length with connecting spigot  
a = Axis dimension  
b = Profile width

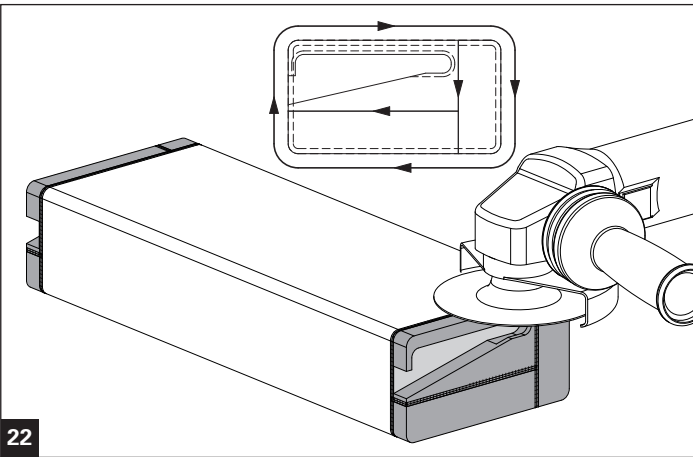
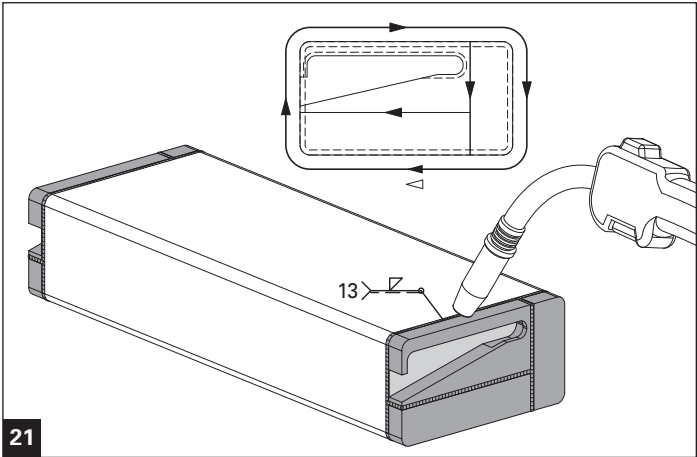
Lunghezza traverso senza raccordo a T  
Lunghezza traverso con raccordo a T  
a = Interasse  
b = larghezza profilo

L1 = a - b - 35  
L2 = a - b - 3

L1 = a - b - 35  
L2 = a - b - 3

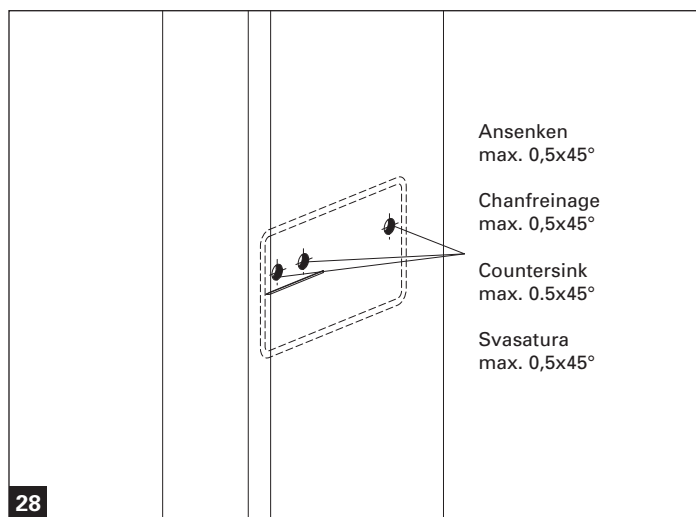
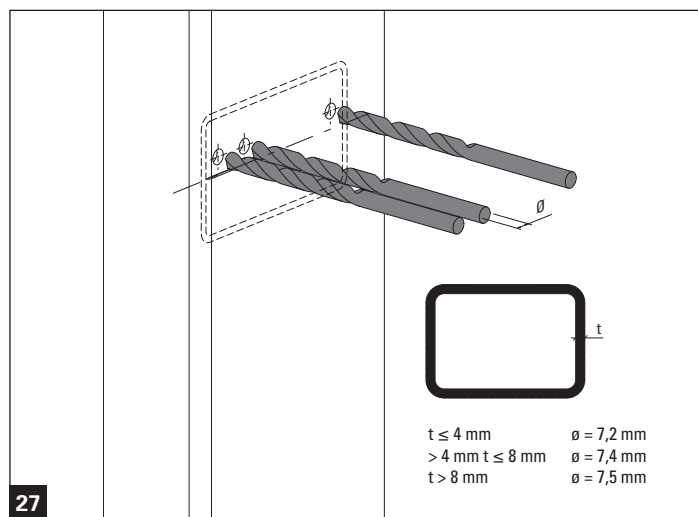
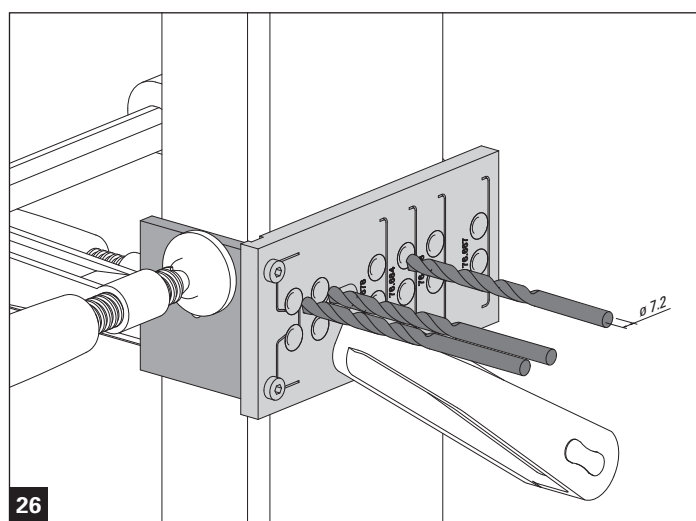
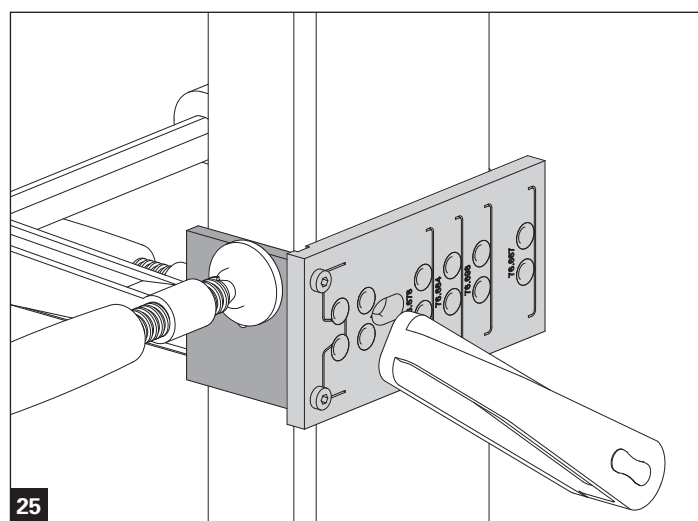
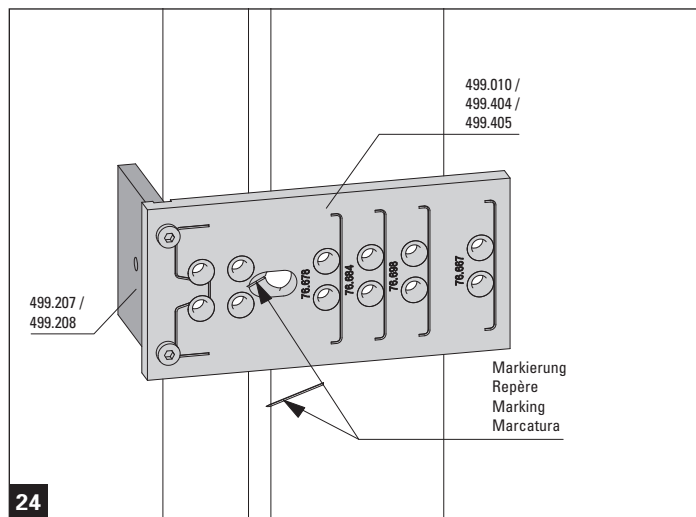
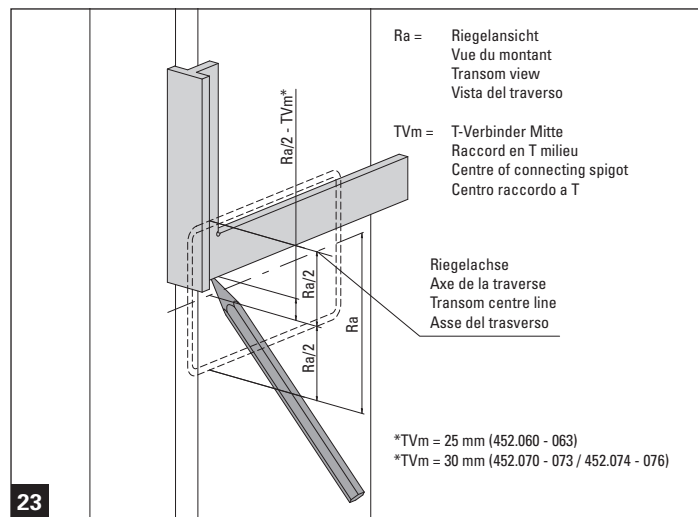
L1 = a - b - 35  
L2 = a - b - 3

L1 = a - b - 35  
L2 = a - b - 3



2. Bohrungen  
 2. Perçages

2. Drill holes  
 2. Fori



### **Oberflächenbehandlung Tragkonstruktion**

Nachdem die Pfosten und Riegel der Tragkonstruktion in der Werkstatt fertig erstellt sind, ist die Oberflächenbehandlung vorzunehmen.

### **Surface treatment of the load-bearing structure**

After the mullion and transom of the load-bearing structure have been completed in the workshop, the surface treatment is to be applied.

### **Traitement de la surface de la construction porteuse**

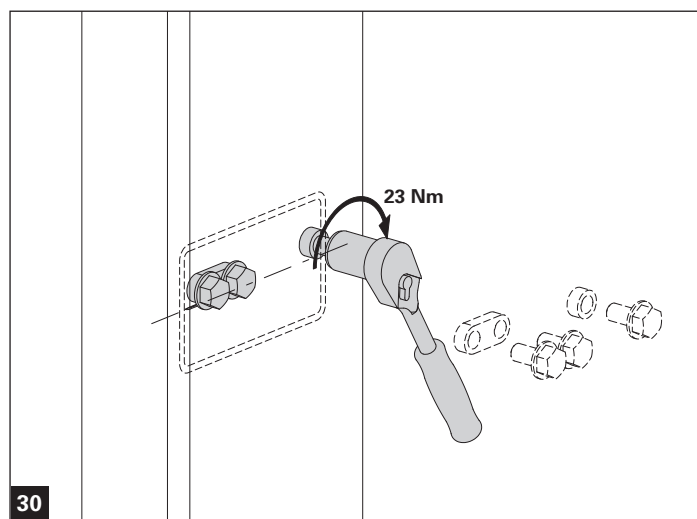
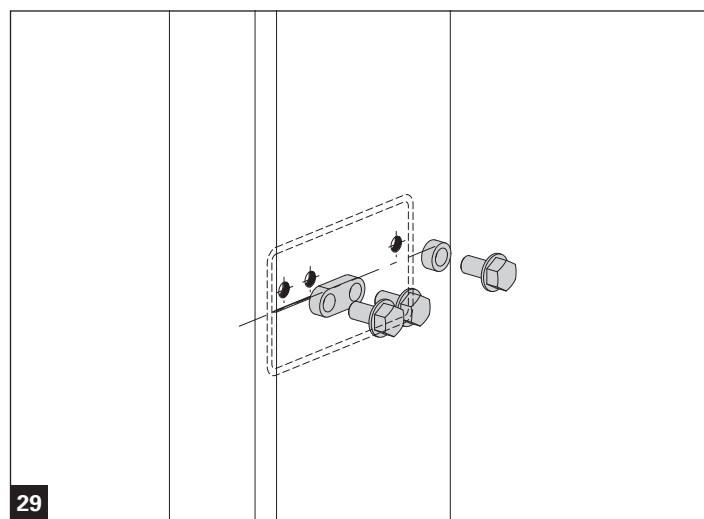
Il doit être procédé au traitement de surface quand les montants et traverses de la construction porteuse ont été réalisés à l'atelier..

### **Trattamento superficiale della struttura portante**

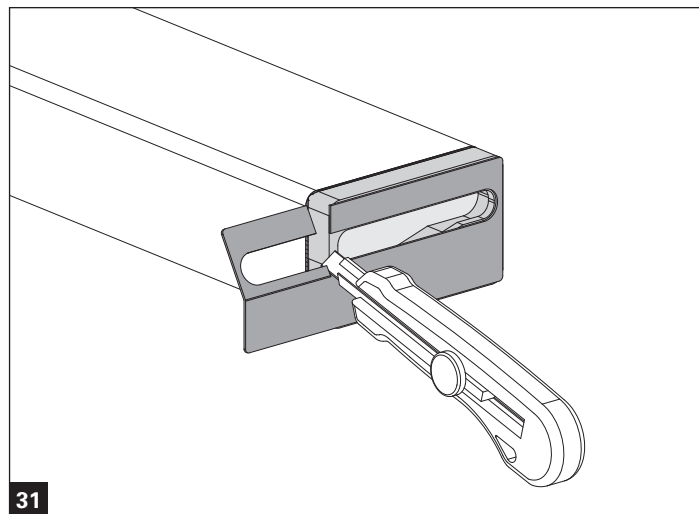
Una volta che i montanti e i traversi della struttura portante sono stati realizzati in officina, è necessario provvedere al loro trattamento superficiale.

3. *Montage des Gegenstücks*  
 3. *Montage de la pièce correspondante*

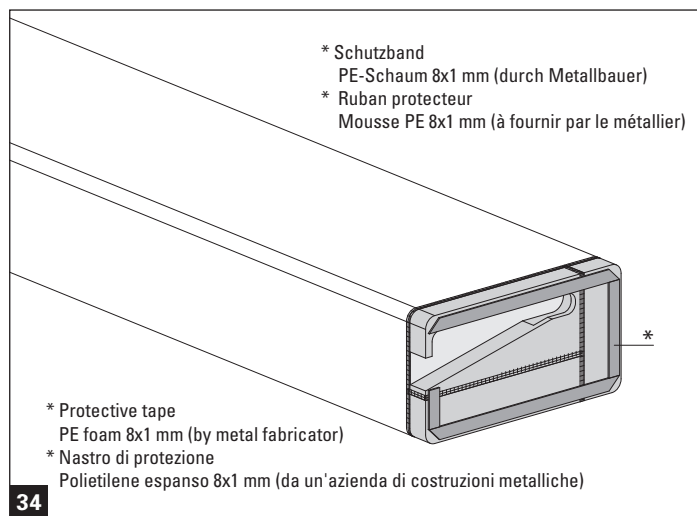
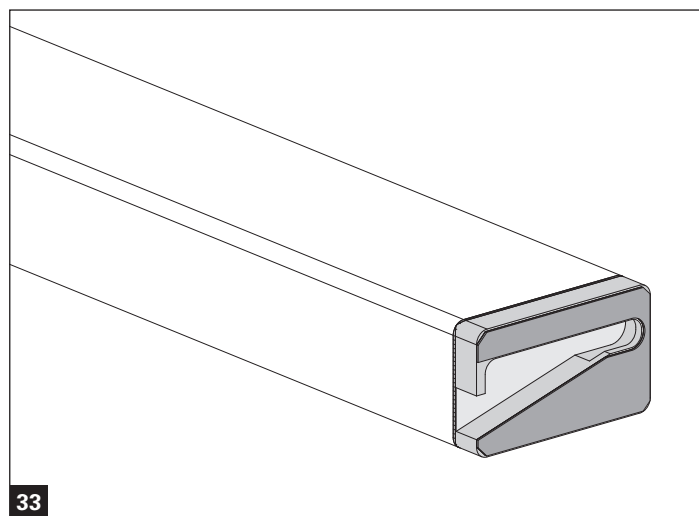
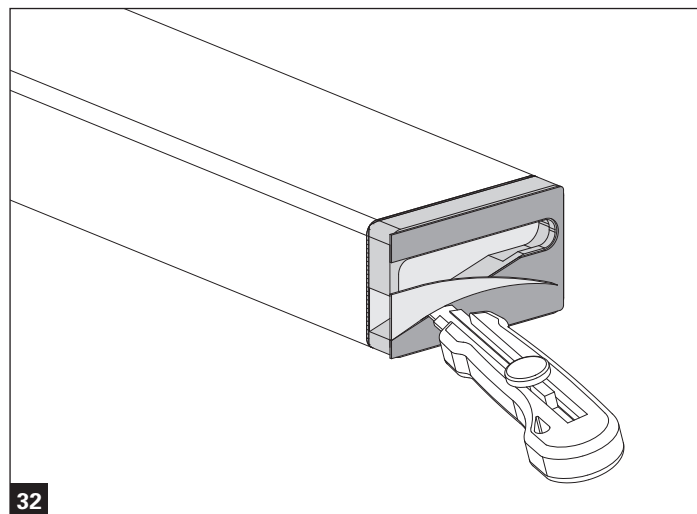
3. *Assembly the counter part*  
 3. *Montaggio della contropiastra*



4. *Zuschnitt und Montage Pfostenschutz*  
 4. *Découpe et montage de la protection du montant*



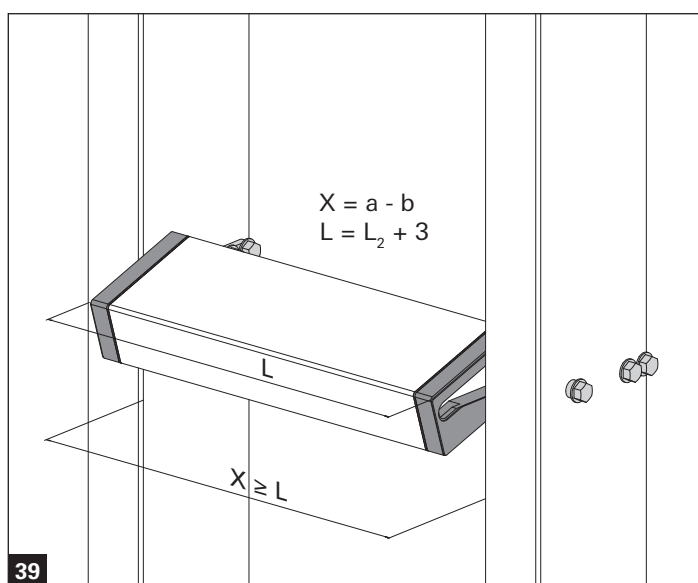
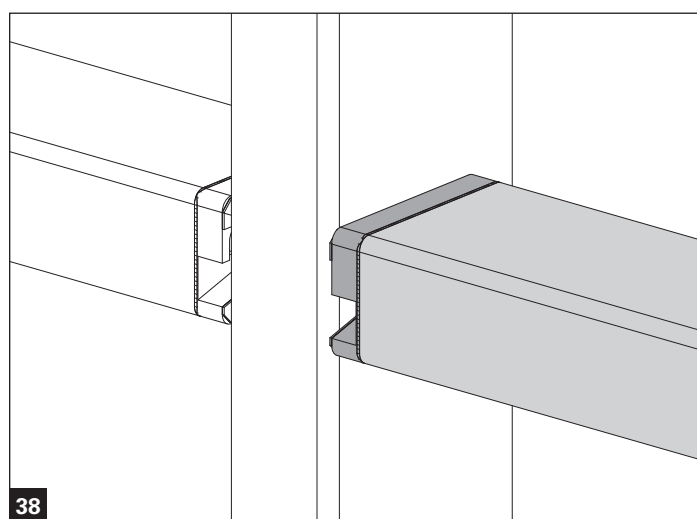
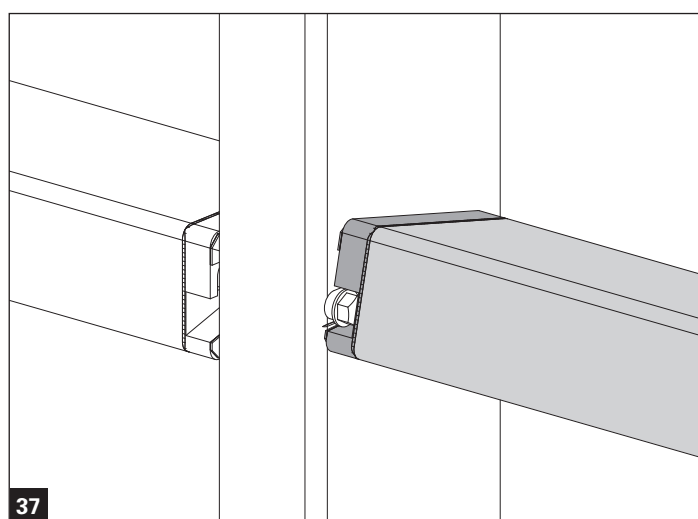
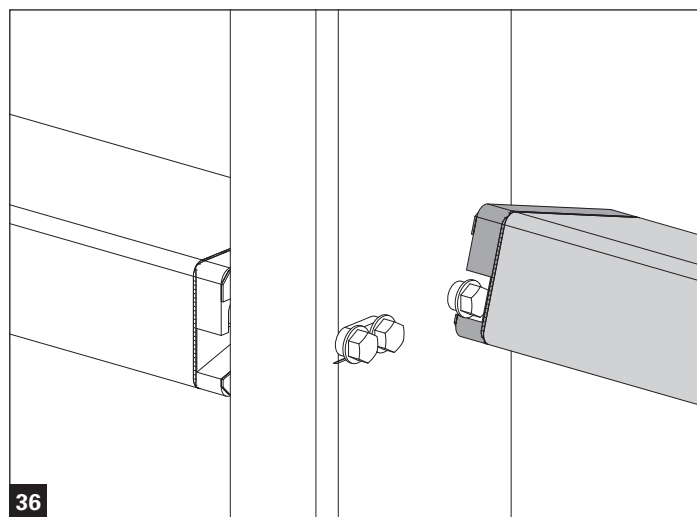
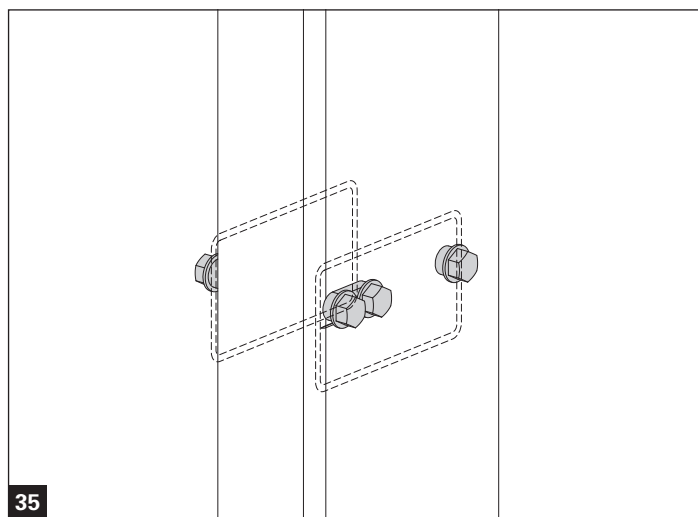
4. *Cutting and assembly the mullion protection*  
 4. *Taglio e applicazione della protezione del traverso*



Hohlprofil mit Aufdoppelung  
 Profil creux avec doublage  
 Hollow profile with doubling  
 Profilo cavo con finitura

5. Montage  
 5. Montage

5. Installation  
 5. Montaggio

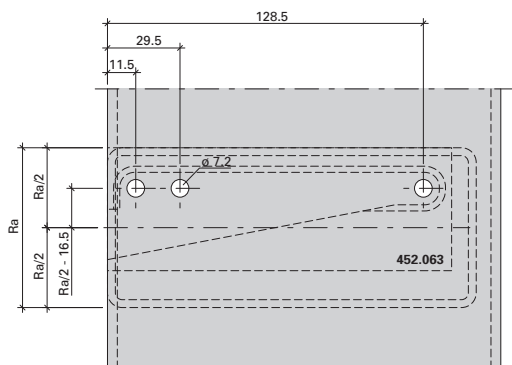
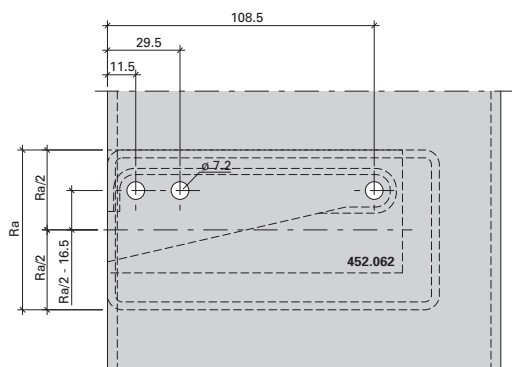
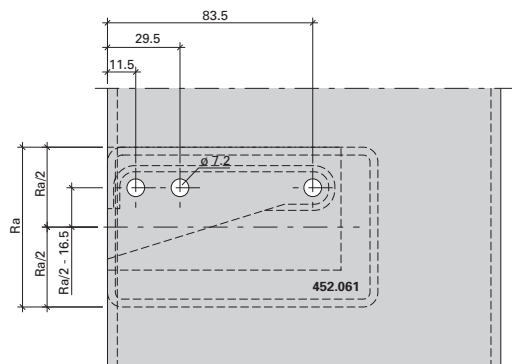
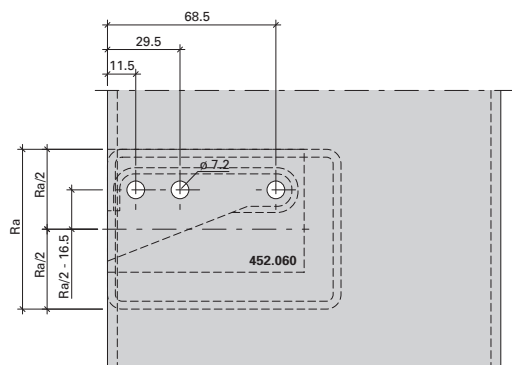


**Bohrbild für CNC-Programmierung**

**Schéma de perçage pour programmation CNC**

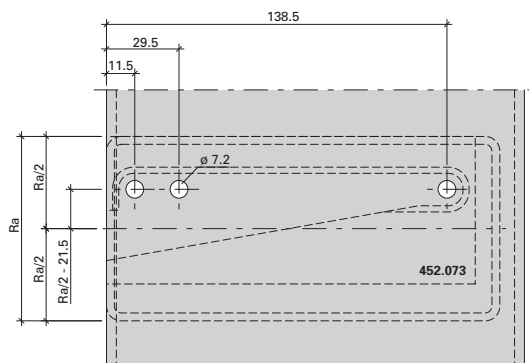
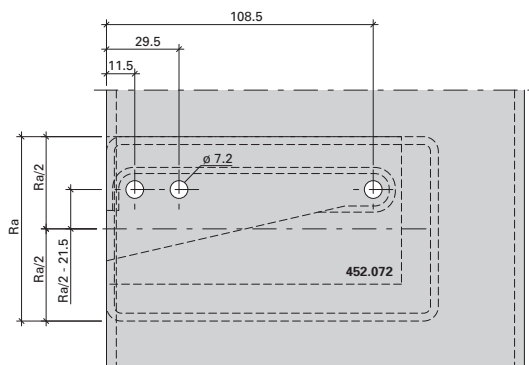
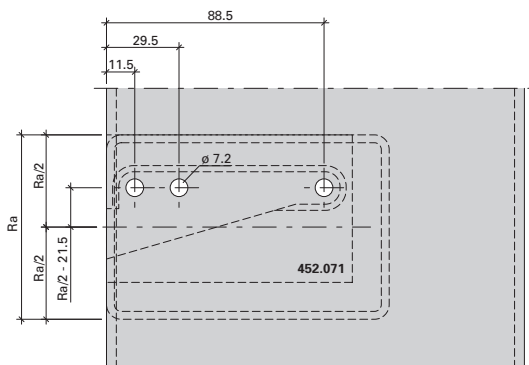
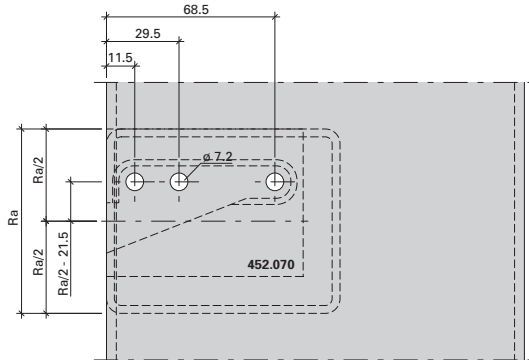
**Drilling pattern for CNC programming**

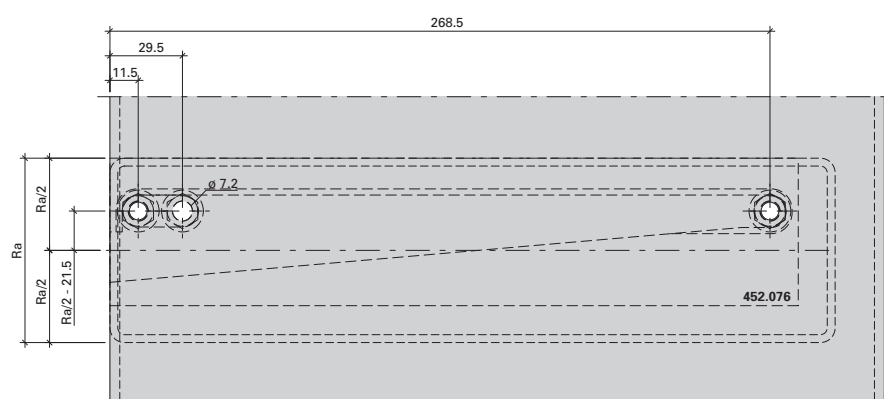
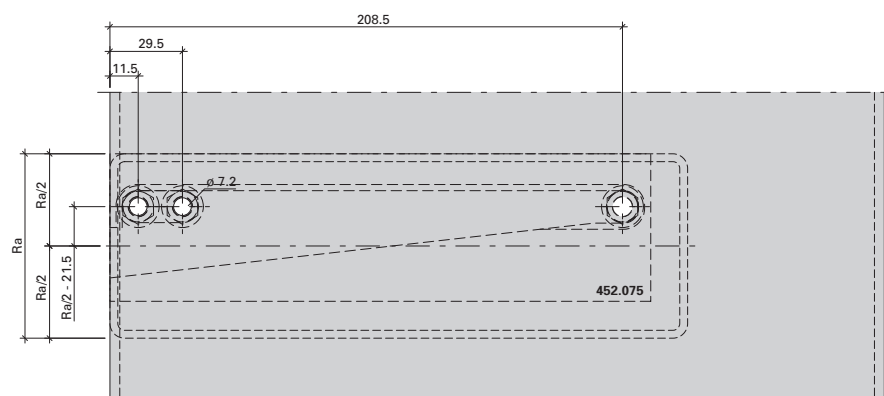
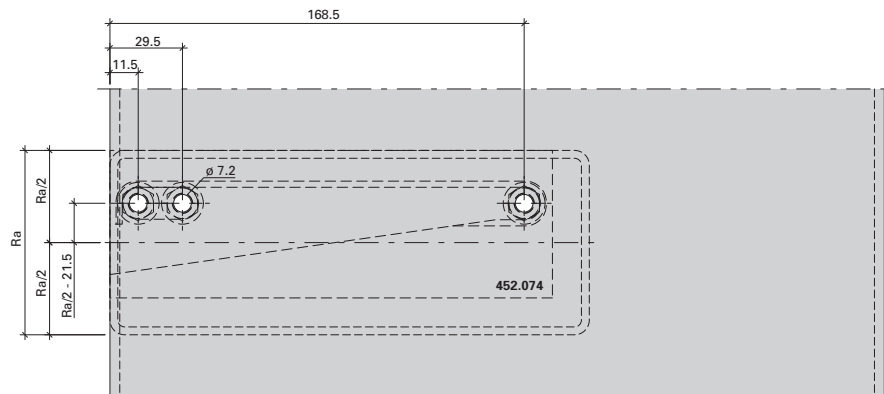
**Piano di foratura per la programmazione CNC**



**Schwerlast T-Verbinder einhängbar**  
**Raccord en T charge lourde à suspendre**  
**Heavy-duty clip-in connecting spigot**  
**Raccordo a T per carichi elevati ad incastro**

VISS Basic Tragkonstruktion  
 Construction porteuse VISS Basic  
 VISS Basic supporting structure  
 Struttura portante VISS Basic





Elemente geschweisst  
Éléments soudés  
Welded units  
Elementi saldati

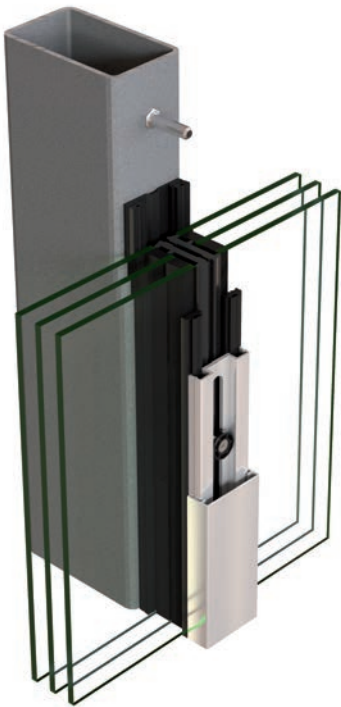
VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic

*Geschweisste Elemente sind bei folgenden  
VISS Basic Systemen einsetzbar:*

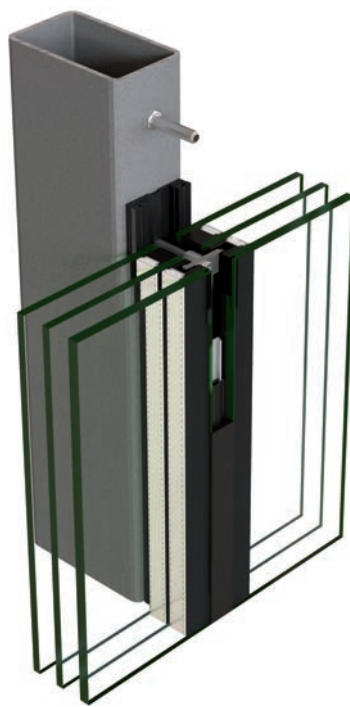
*Les éléments soudés sont utilisables sur les  
systèmes VISS Basic suivants:*

*Welded units can be used in the  
following VISS Basic systems:*

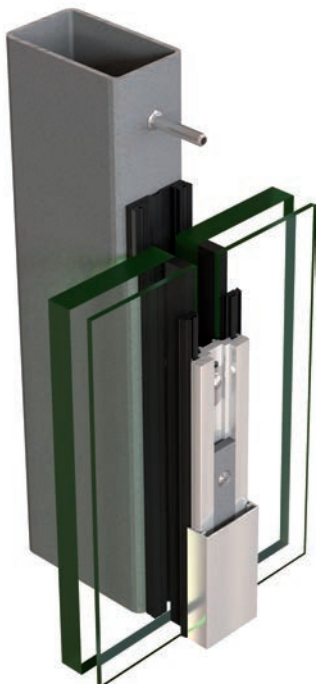
*Gli elementi saldati possono essere utilizzati  
con i seguenti sistemi VISS Basic:*



VISS Basic



VISS Basic SG / VISS Basic Semi SG



VISS Basic RC

**Einsatzbereich geschweisste Elemente:**

- Elemente mit ein- oder zweiseitig schräg geschnittenen Riegelverbindungen
- Elemente mit abgewinkeltem Grundriss (z.B. konkav/konvex)
- Elemente mit biegesteifen Pfosten-/Riegelverbindungen
- Grossflächige Elemente, welche in der Werkstatt vorgefertigt werden

**Area of application of welded units:**

- Units with transom joints that are cut diagonally on one or both sides
- Units with curved floor plans (e.g. concave/convex)
- Units with structurally rigid mullion/transom joints
- Large units that are pre-fabricated in the workshop

**Ablaufschritte:**  
**Tragkonstruktion mit geschweissten Elementen**

|                                        | Seite |
|----------------------------------------|-------|
| 1. Füllelementgewichte / Tragfähigkeit | 36    |
| 2. Konstruktionen                      | 32    |
| 3. Verarbeitung                        | 37    |

**Process steps:**  
**Load-bearing structure with welded units**

|                                              | Page |
|----------------------------------------------|------|
| 1. Infill unit weights/load-bearing capacity | 36   |
| 2. Constructions                             | 32   |
| 3. Processing                                | 37   |

**Domaine d'utilisation des éléments soudés:**

- Éléments avec jonctions de traverse coupées obliquement d'un ou de deux côtés
- Éléments avec tracé développé (par ex. concave/convexe)
- Éléments avec jonction montant-traverse résistante à la flexion
- Éléments de grand format préfabriqués en atelier

**Campo di impiego degli elementi saldati:**

- Elementi con raccordi per traversi a taglio obliquo su uno o ambo i lati
- Elementi con pianta ad angolo (ad es.: concavo/convesso)
- Elementi con raccordi trasverso/montante resistenti alla flessione
- Elementi di grande formato preassemblati in officina

**Étapes du déroulement:**  
**Construction porteuse avec éléments soudés**

|                                             | Page |
|---------------------------------------------|------|
| 1. Poids de remplissage / charge admissible | 36   |
| 2. Constructions                            | 32   |
| 3. Usinage                                  | 37   |

**Sequenza delle operazioni:**  
**Struttura portante a elementi saldati**

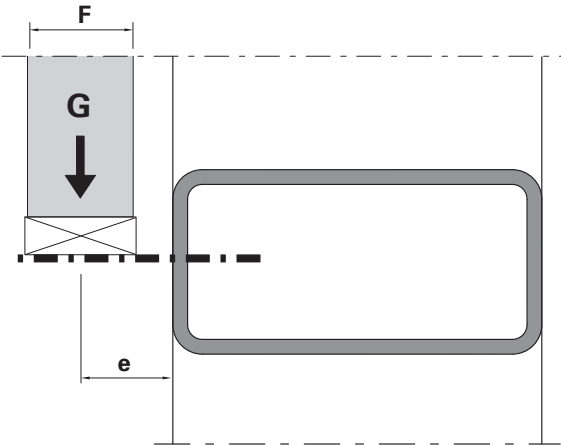
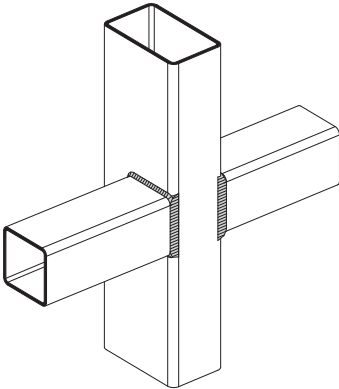
|                                                           | Pagina |
|-----------------------------------------------------------|--------|
| 1. Pesi degli elementi di riempimento / capacità portante | 36     |
| 2. Tipologie di costruzione                               | 32     |
| 3. Lavorazione                                            | 37     |

Elemente geschweisst  
Eléments soudés  
Welded units  
Elementi saldati

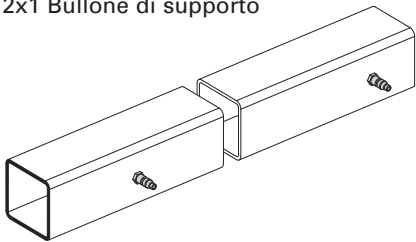
VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic

Füllelementgewichte / Tragfähigkeit (G)  
Poids de remplissage / Charge admissible (G)

Weight of infill elements / Load capacity (G)  
Peso elemento di riempimento / Capacità portante (G)

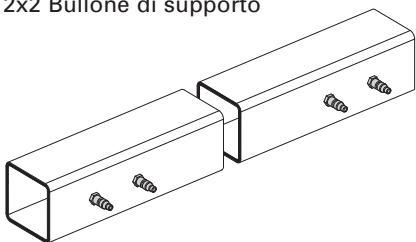


2x1 Traganker  
2x1 Boulons-supports  
2x1 Supporting bolts  
2x1 Bullone di supporto



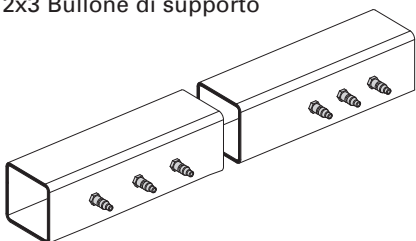
|        |    | 50 mm                                             |         | 60 mm                                             |         |
|--------|----|---------------------------------------------------|---------|---------------------------------------------------|---------|
| F      | e  | Dimension<br>Dimension<br>Dimension<br>Dimensione | G       | Dimension<br>Dimension<br>Dimension<br>Dimensione | G       |
| mm     | mm |                                                   |         |                                                   |         |
| 6 - 45 | 45 | min. 50/50/3 mm                                   | 0,75 kN | min. 60/60/3 mm                                   | 0,75 kN |

2x2 Traganker  
2x2 Boulons-supports  
2x2 Supporting bolts  
2x2 Bullone di supporto



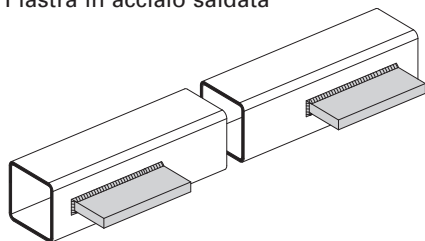
|        |    | 50 mm                                             |        | 60 mm                                             |        |
|--------|----|---------------------------------------------------|--------|---------------------------------------------------|--------|
| F      | e  | Dimension<br>Dimension<br>Dimension<br>Dimensione | G      | Dimension<br>Dimension<br>Dimension<br>Dimensione | G      |
| mm     | mm |                                                   |        |                                                   |        |
| 6 - 45 | 45 | min. 50/50/3 mm                                   | 1,5 kN | min. 60/60/3 mm                                   | 1,5 kN |

2x3 Traganker  
2x3 Boulons-supports  
2x3 Supporting bolts  
2x3 Bullone di supporto



|        |    | 50 mm                                             |      | 60 mm                                             |      |
|--------|----|---------------------------------------------------|------|---------------------------------------------------|------|
| F      | e  | Dimension<br>Dimension<br>Dimension<br>Dimensione | G    | Dimension<br>Dimension<br>Dimension<br>Dimensione | G    |
| mm     | mm |                                                   |      |                                                   |      |
| 6 - 45 | 45 | min. 50/50/3 mm                                   | 3 kN | min. 60/60/3 mm                                   | 3 kN |

Flachstahl eingeschweisst  
 Acier plat soudé  
 Flat steel welding  
 Piastra in acciaio saldata



|                |             | 50 mm                                             |          | 60 mm                                             |          |
|----------------|-------------|---------------------------------------------------|----------|---------------------------------------------------|----------|
| <b>F</b>       | <b>e</b>    | Dimension<br>Dimension<br>Dimension<br>Dimensione | <b>G</b> | Dimension<br>Dimension<br>Dimension<br>Dimensione | <b>G</b> |
| mm             | mm          |                                                   |          |                                                   |          |
| <b>6 - 40</b>  | <b>30</b>   | min. 50/50/3 mm                                   | 13 kN    | min. 60/60/3 mm                                   | 14 kN    |
| <b>41 - 55</b> | <b>37,5</b> | min. 50/50/3 mm                                   | 11 kN    | min. 60/60/3 mm                                   | 12 kN    |
| <b>56 - 70</b> | <b>45</b>   | min. 50/50/3 mm                                   | 9 kN     | min. 60/60/3 mm                                   | 10 kN    |

#### Hinweis:

Die maximale Riegeldurchbiegung L/500 darf nicht überschritten werden und jegliche Berührung zwischen Riegel und Füllelement (Ausfachung) muss verhindert werden.

Werden die obigen Füllelementgewichte überschritten, so ist eine Prüfung im Einzelfall erforderlich.

#### Remarque:

Le flambage maximal de la traverse L/500 ne doit pas être dépassé et tout contact entre traverse et élément de remplissage (boulons-support et supports de vitrage) doit être empêché.

Si les poids de remplissage indiqués ci-dessus sont dépassés, un contrôle du cas particulier sera nécessaire.

#### Note:

The maximum transom deflection L/500 must not be exceeded and any contact between transom and infill unit (infill) must be prevented.

If the above infill unit weights are exceeded, an individual test is required.

#### Nota:

Non deve essere superata il valore massimo di flessione del traverso L/500 ed è necessario evitare qualsiasi contatto fra il traverso e l'elemento di riempimento (tamponamento).

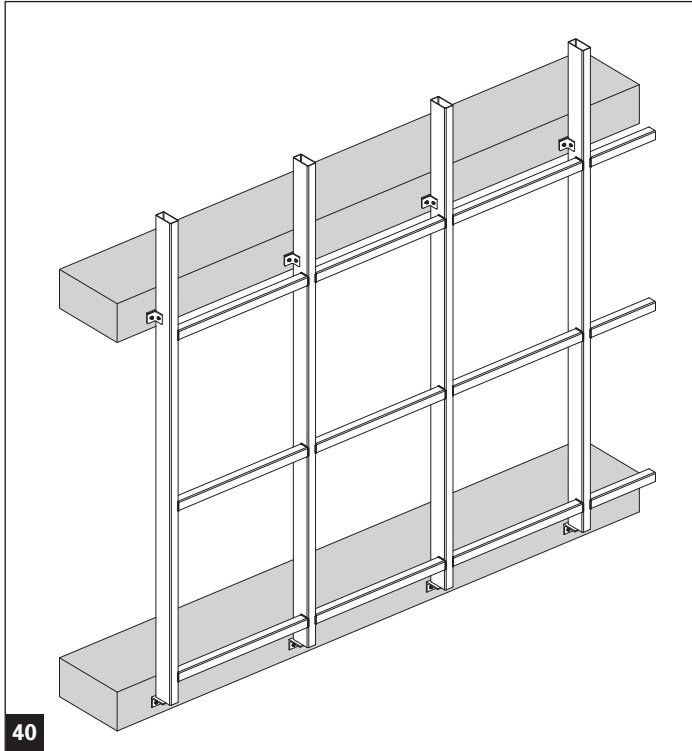
Qualora i pesi degli elementi di riempimento riportati sopra vengano superati, sarà necessaria una verifica caso per caso.

Elemente geschweisst  
Eléments soudés  
Welded units  
Elementi saldati

VISS Basic Tragkonstruktion  
Construction porteuse VISS Basic  
VISS Basic supporting structure  
Struttura portante VISS Basic

#### Konstruktionen

#### Constructions



Rahmenbauweise Riegelverbindung geschweisst  
Méthode de construction par éléments jonction soudée de la traverse  
Unitised construction of welded transom joint  
Costruzione a elementi con raccordo traverso saldato

#### Constructions

#### Tipologie di costruzione



Segmentverglasung geschweisst  
Vitrage segmenté soudé  
Welded faceted glazing  
Vetrare segmentate saldate

## Verarbeitung

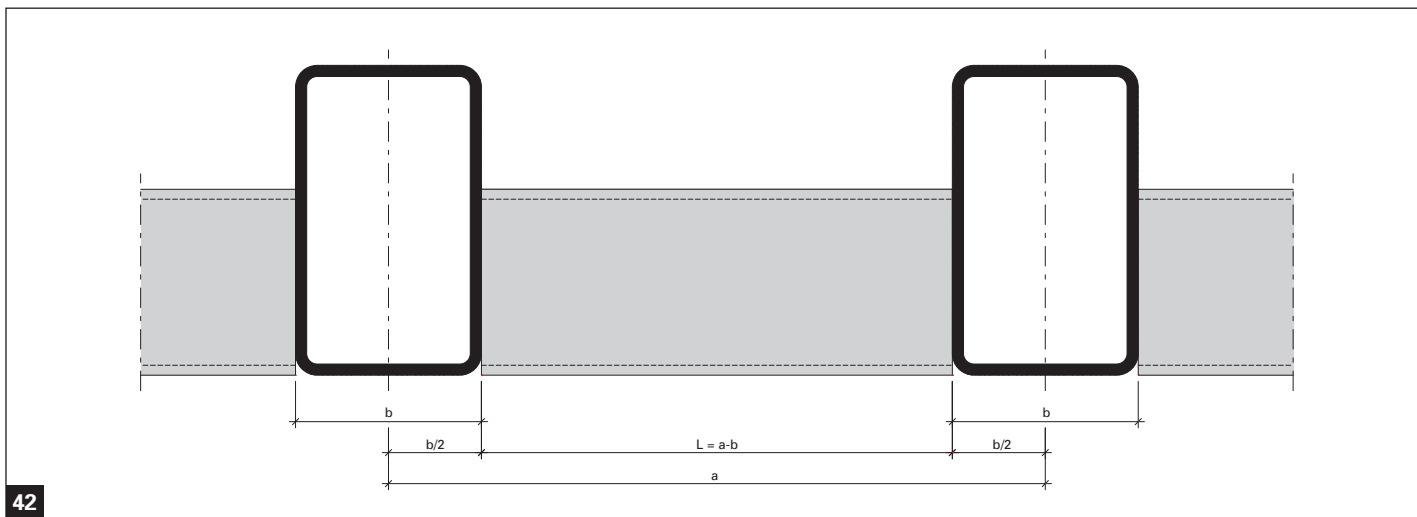
### Usinage

1. Zuschnitt Riegel
1. Découpe traverse

## Processing

### Lavorazione

1. Transom cutting
1. Taglio dei traversi



Länge Riegel  $L = a - b$

$a$  = Achsmass  
 $b$  = Profilbreite  
 $L$  = Riegellänge

Longueur traverse  $L = a - b$

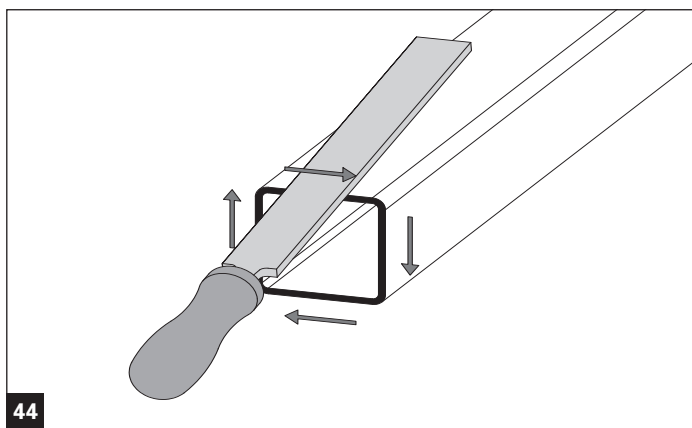
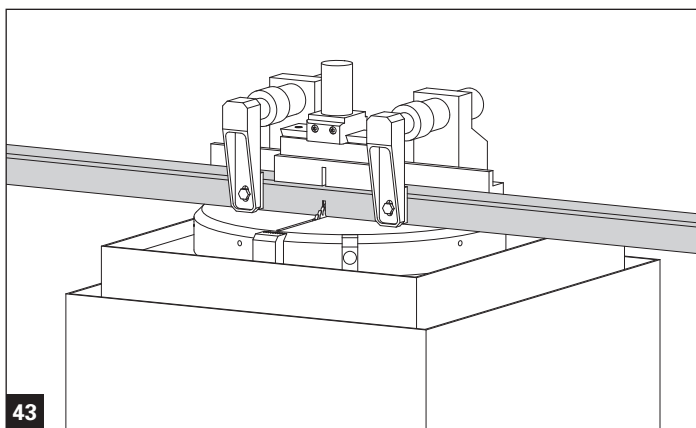
$a$  = Entraxe  
 $b$  = Largeur du profilé  
 $L$  = Longueur de la traverse

Length of transom  $L = a - b$

$a$  = Axis dimension  
 $b$  = Profile width  
 $L$  = Transom length

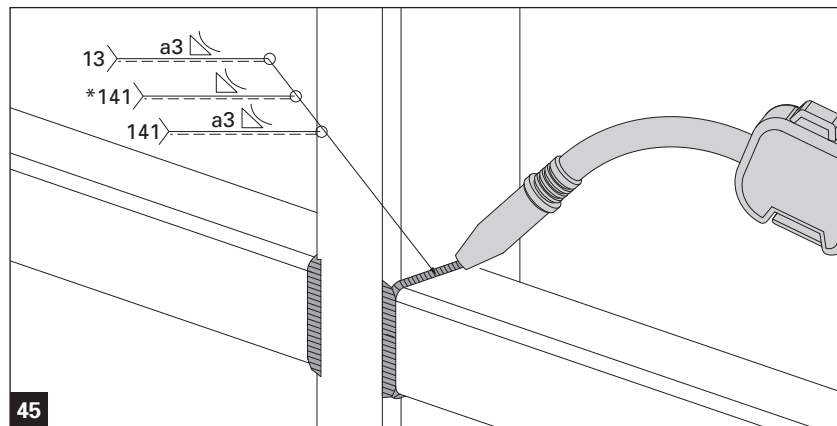
Lunghezza traverso  $L = a - b$

$a$  = Interasse  
 $b$  = Larghezza profilo  
 $L$  = Lunghezza traverso



2. Riegel-/Pfostenverbindung geschweisst  
 2. Jonction traverse-montant soudée

2. Welded transom/mullion joint  
 2. Raccordo traverso/montante saldato



Schweisssnaht Riegelverbindung umlaufend, Stärke der Schweisssnaht entsprechend statischen Anforderungen (mindestens jedoch  $t = 3 \text{ mm}$ )

Cordon de soudure périphérique de la jonction de la traverse, épaisseur du cordon en fonction des exigences statiques (cependant au moins  $t = 3 \text{ mm}$ )

Weld seam on all sides of transom joint, strength of weld seam in accordance with structural requirements (however  $t =$  at least  $3 \text{ mm}$ )

Raccordo del traverso con cordone di saldatura perimetrale, spessore del cordone a seconda dei requisiti statici (tuttavia almeno pari a  $t = 3 \text{ mm}$ )

#### Variante Schweissverfahren

Für hohe ästhetische Anforderungen an die Schweisssnähte ist allenfalls das TIG/WIG Schweissverfahren zu empfehlen. Dieses Verfahren ergibt sehr feine und gleichmässige Schweisssnähte. Die TIG/WIG Schweissung ist insbesondere auch dann zu empfehlen, wenn Einselelemente eingesetzt werden, welche mit wenig Spiel einzubauen sind.

##### \* Hinweis:

Werden die mittels TIG/WIG eingeschweissten Riegel erhöhten statischen Belastungen ausgesetzt, so ist durch den Metallbauer zu prüfen ob die TIG/WIG-Schweisssnähte diese Belastungen aufnehmen können.

#### Variante de procédé de soudage

Le procédé de soudage TIG/WIG peut être recommandé pour les exigences esthétiques de grande qualité. Ce procédé fournit des cordons de soudure très fins et réguliers. Le soudage TIG/WIG est également en particulier recommandé quand des éléments de remplissage qui doivent être montés sans disposer de beaucoup de jeu sont utilisés.

##### \* Remarque:

Si les traverses soudées au moyen du procédé TIG/WIG sont soumises à des charges statiques élevées, le constructeur métallique devra vérifier que les cordons de soudure TIG/WIG sont en mesure de les absorber.

#### Welding method options

For weld seams with high aesthetic requirements, the TIG/WIG welding method is recommended. This method results in very fine and even weld seams.

The TIG/WIG welding method is recommended in particular when insert units are used, which should be installed with very little play.

##### \* Note:

If increased structural loads are applied by means of TIG/WIG welded transoms, the metal fabricator must check whether the TIG/WIG weld seams can accommodate these loads.

#### Variante procedimento con saldatura

Qualora i cordoni di saldatura debbano rispondere a elevati requisiti estetici si consiglia eventualmente di ricorrere al procedimento di saldatura TIG/WIG, che consente di ottenere cordoni molto sottili e omogenei.

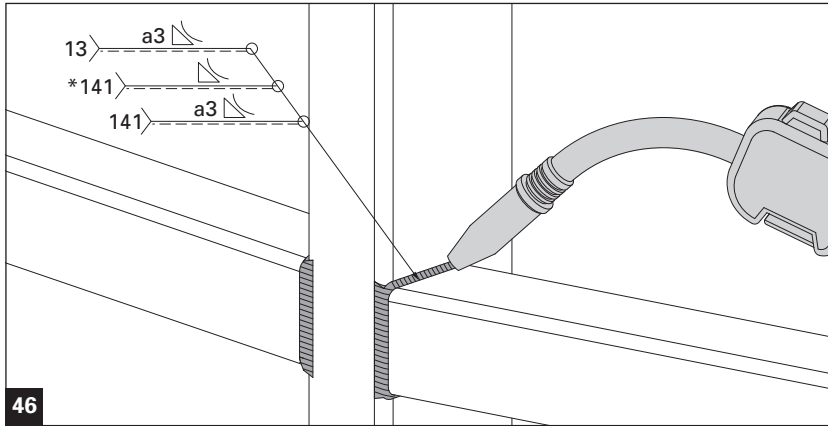
La saldatura TIG/WIG è consigliabile in particolare anche in tutti quei casi in cui vengono impiegati elementi da montare con pochissimo gioco.

##### \* Nota:

Se i traversi saldati con il procedimento TIG/WIG devono essere sottoposti a carichi statici elevati, l'azienda di costruzioni metalliche dovrà verificare se i cordoni di saldatura così realizzati sono in grado di sopportare detti carichi.

3. Riegel-/Pfostenverbindung Segmentverglasung geschweisst  
3. Jonction traverse-montant vitrage segmenté soudé

3. Welded transom/mullion joint for faceted glazing  
3. Raccordo traverso/montante vetrata segmentata saldato



Schweissnaht Riegelverbindung Segmentverglasung umlaufend, Stärke der Schweissnaht entsprechend statischen Anforderungen (mindestens jedoch  $t = 3 \text{ mm}$ )

Cordon de soudure jonction montant-traverse vitrage segmenté périphérique, épaisseur du cordon en fonction des exigences statiques (cependant au moins  $t = 3 \text{ mm}$ )

Weld seam on all sides of transom joint for faceted glazing, strength of weld seam in accordance with structural requirements (however  $t =$  at least  $3 \text{ mm}$ )

Raccordo del traverso di vetrata segmentata con cordone di saldatura perimetrale, spessore del cordone a seconda dei requisiti statici (tuttavia almeno pari a  $t = 3 \text{ mm}$ )

#### Variante Schweissverfahren

Für hohe ästhetische Anforderungen an die Schweissnähte ist allenfalls das TIG/WIG Schweissverfahren zu empfehlen. Dieses Verfahren ergibt sehr feine und gleichmässige Schweissnähte. Die TIG/WIG Schweissung ist insbesondere auch dann zu empfehlen, wenn Einselemente eingesetzt werden, welche mit wenig Spiel einzubauen sind.

##### \* Hinweis:

Werden die mittels TIG/WIG eingeschweissten Riegel erhöhten statischen Belastungen ausgesetzt, so ist durch den Metallbauer zu prüfen ob die TIG/WIG-Schweissnähte diese Belastungen aufnehmen können.

#### Variante de procédé de soudage

Le procédé de soudage TIG/WIG peut être recommandé pour les exigences esthétiques de grande qualité. Ce procédé fournit des cordons de soudure très fins et réguliers. Le soudage TIG/WIG est également en particulier recommandé quand des éléments de remplissage qui doivent être montés sans disposer de beaucoup de jeu sont utilisés.

##### \* Remarque:

Si les traverses soudées au moyen du procédé TIG/WIG sont soumises à des charges statiques élevées, le constructeur métallique devra vérifier que les cordons de soudure TIG/WIG sont en mesure de les absorber.

#### Welding method options

For weld seams with high aesthetic requirements, the TIG/WIG welding method is recommended. This method results in very fine and even weld seams. The TIG/WIG welding method is recommended in particular when insert units are used, which should be installed with very little play.

##### \* Note:

If increased structural loads are applied by means of TIG/WIG welded transoms, the metal fabricator must check whether the TIG/WIG weld seams can accommodate these loads.

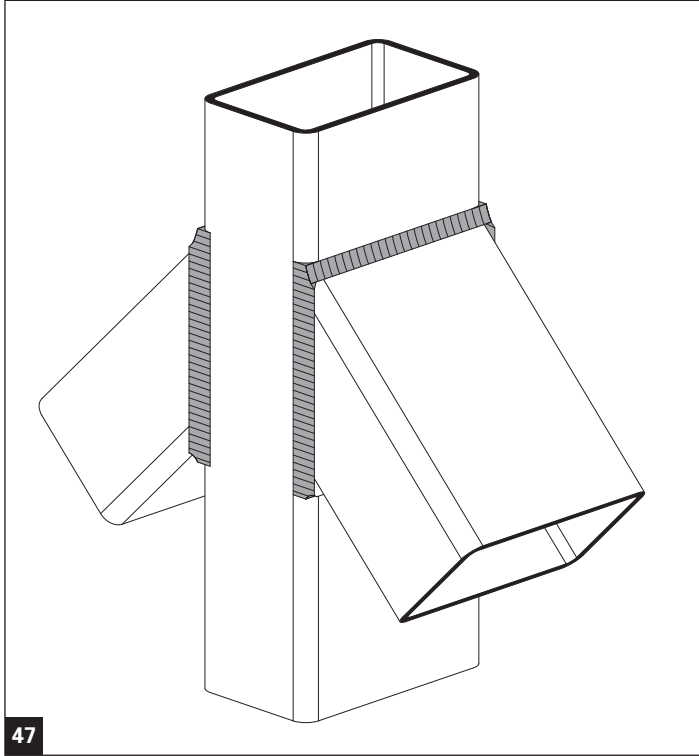
#### Variante procedimento con saldatura

Qualora i cordoni di saldatura debbano rispondere a elevati requisiti estetici si consiglia eventualmente di ricorrere al procedimento di saldatura TIG/WIG, che consente di ottenere cordoni molto sottili e omogenei. La saldatura TIG/WIG è consigliabile in particolare anche in tutti quei casi in cui vengono impiegati elementi da montare con pochissimo gioco.

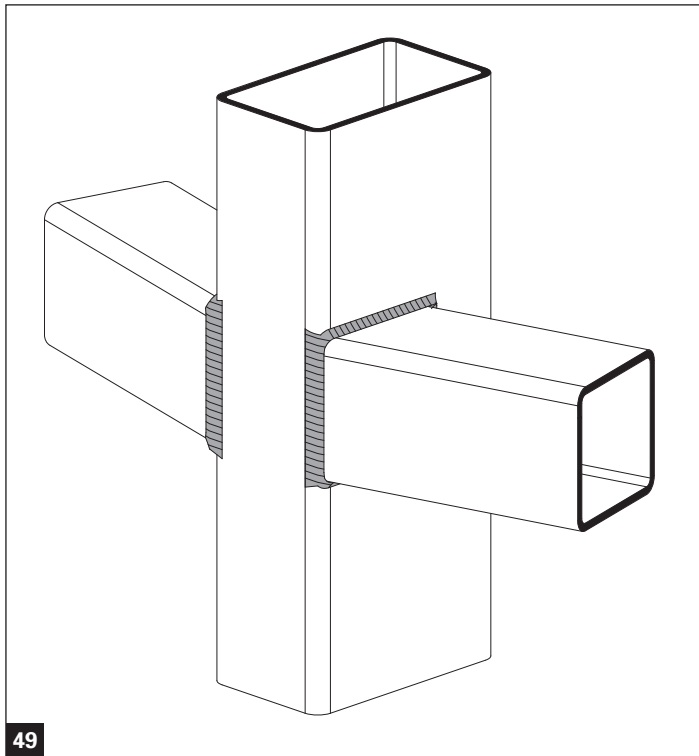
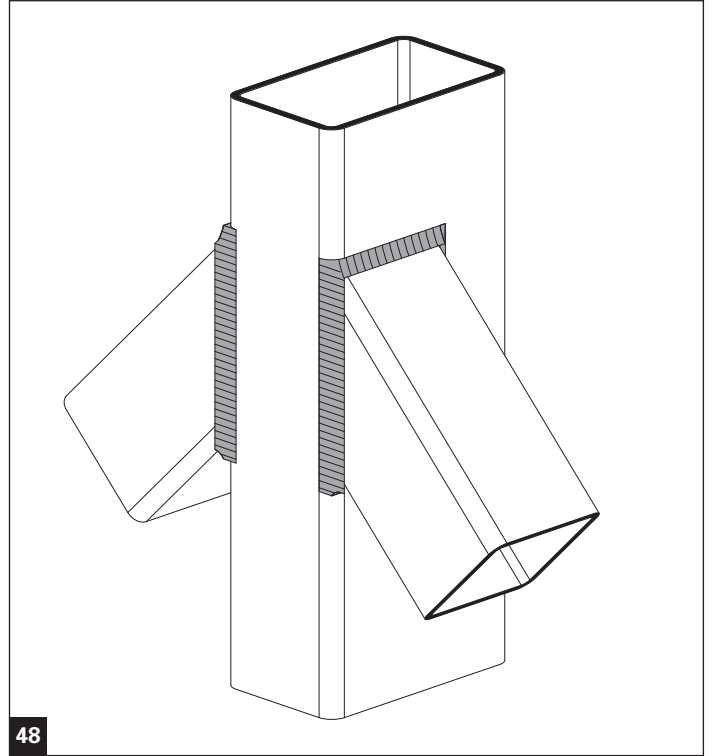
##### \* Nota:

Se i traversi saldati con il procedimento TIG/WIG devono essere sottoposti a carichi statici elevati, l'azienda di costruzioni metalliche dovrà verificare se i cordoni di saldatura così realizzati sono in grado di sopportare detti carichi.

4. *Riegelschweissung mit schräg eingebautem Riegel*  
 4. *Soudage avec traverse montée obliquement*

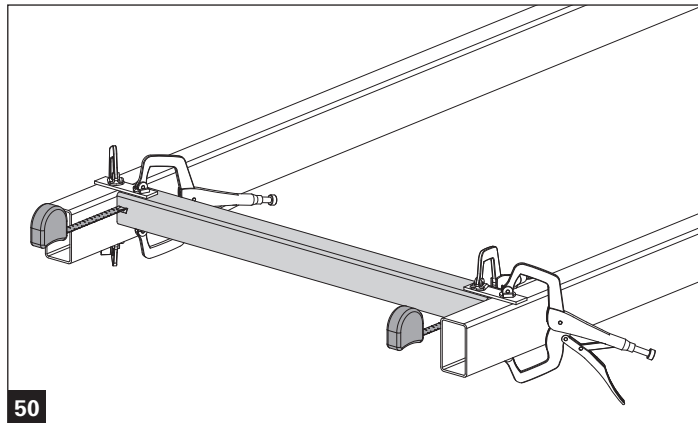


4. *Transom welding with transom installed diagonally*  
 4. *Saldatura del traverso con traverso montato obliquo*

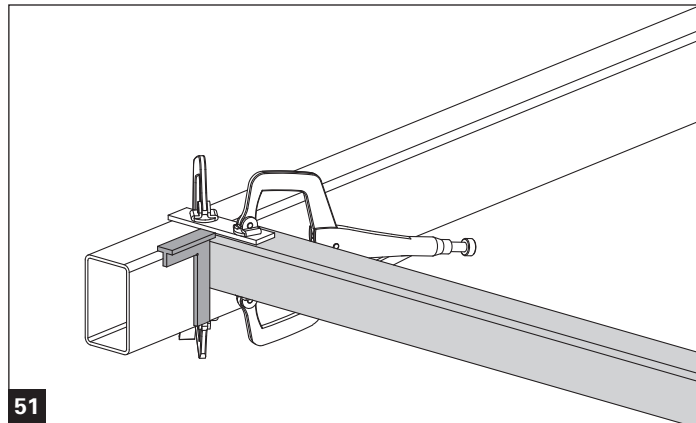


5. Schweissung Pfosten-Rahmen-Verbindung  
 5. Soudage jonction montant-cadre

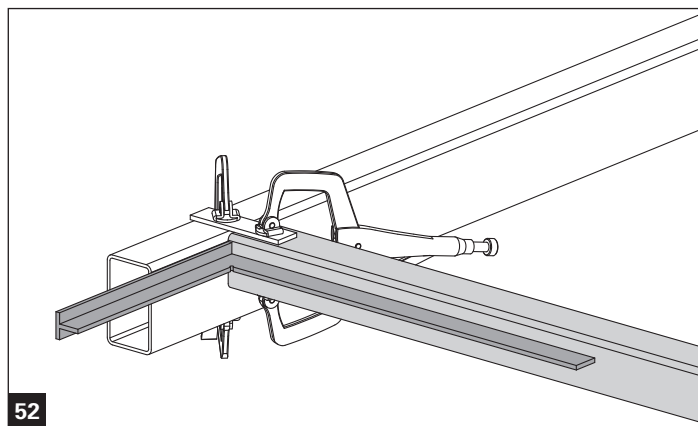
5. Welding of mullion/frame joint  
 5. Saldatura del raccordo montante-telaio



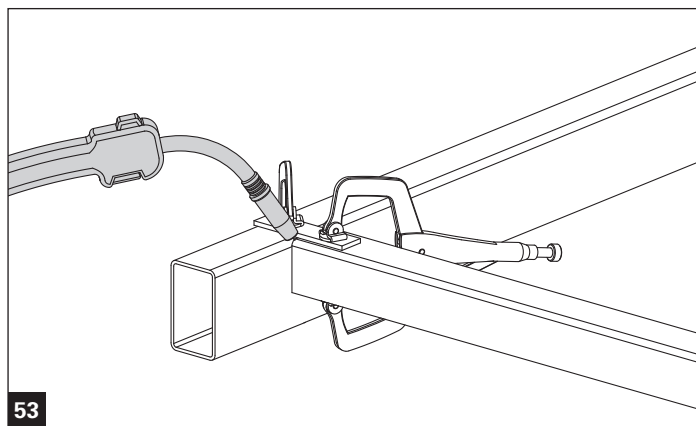
Riegel einmessen und festklemmen  
 Mesurer la traverse et la bloquer  
 Measure transom and fix in place  
 Misurare il traverso, quindi fissarlo



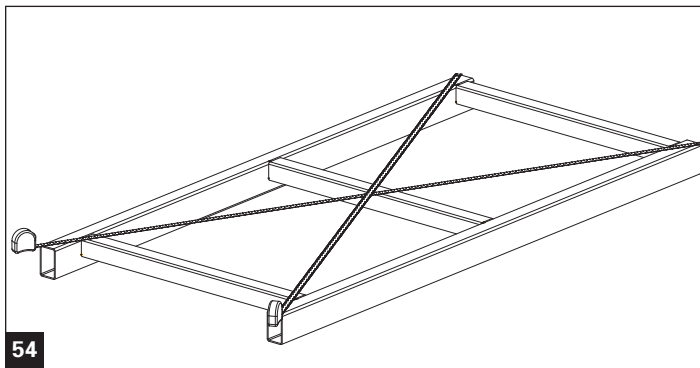
Riegel im Winkel ausrichten und festklemmen  
 Aligner la traverse à angle droit et la bloquer  
 Align transom at an angle and fix into place  
 Allineare gli angoli del traverso, quindi fissarlo



Rahmen rechtwinklig ausrichten  
 Aligner le cadre à angle droit  
 Align frame at a right angle  
 Allineare gli angoli del telaio a 90°

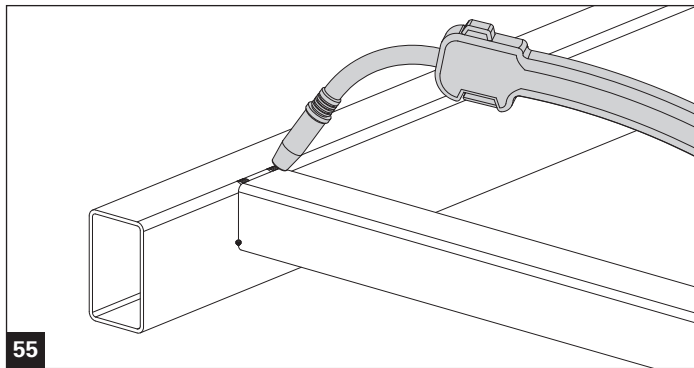


Riegel mittels örtlicher Schweissung provisorisch heften  
 Pointer provisoirement la traverse par un soudage local  
 Temporarily attach transom by means of local welding  
 Fissare provvisoriamente il traverso con dei punti di saldatura



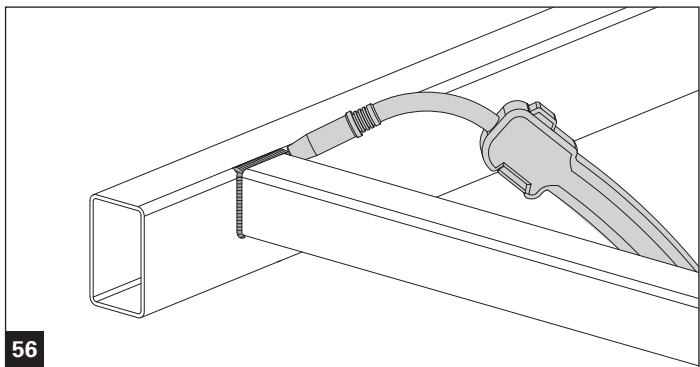
54

Diagonale ausmessen und evtl. nachrichten  
 Mesurer la diagonale et aligner de nouveau si nécessaire  
 Measure the diagonals and realign if necessary  
 Misurare le diagonali e se necessario correggerle



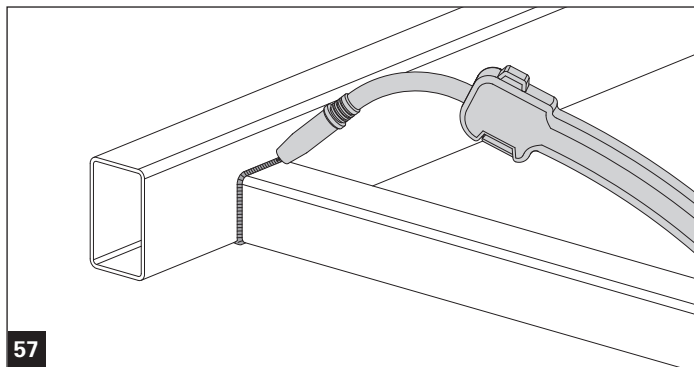
55

Haftschweissung an 4 Eckpunkten  
 Soudage par points à 4 points angulaires  
 Tack welding at 4 corner points  
 Fissare saldando sui quattro angoli



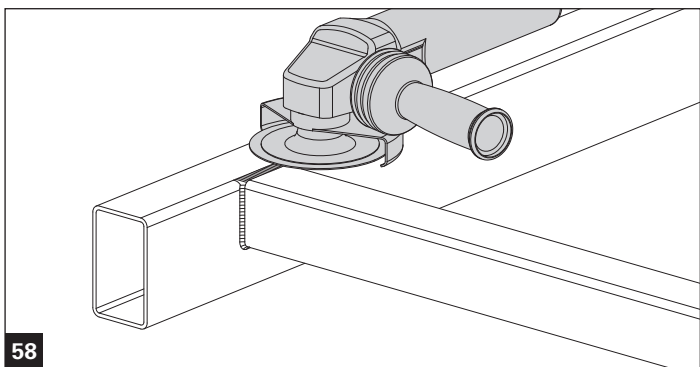
56

Riegel vorne und seitlich schweissen  
 Souder la traverse à l'avant et sur le côté  
 Weld transom at the front and at the side  
 Saldare il traverso anteriormente e lateralmente



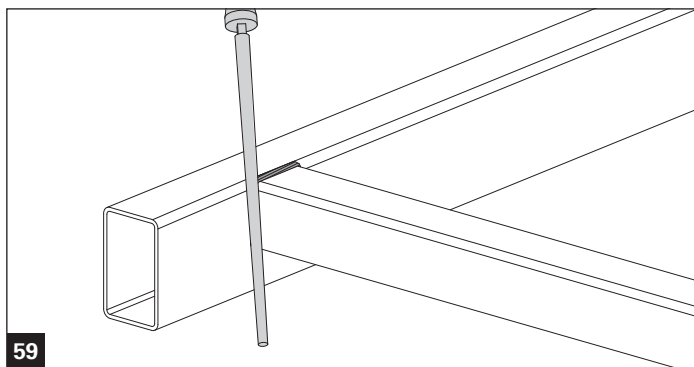
57

Riegel auf Rückseite fertig schweissen und Rahmen richten  
 Terminer de souder la traverse en face arrière et redresser le cadre  
 Finally, weld transom on the rear side and align frame  
 Completare quindi la saldatura sul lato posteriore e allineare il telaio



58

Schweißnaht vorne im Nutbereich verschleifen  
 Polir le cordon de soudure à l'avant dans la zone de la rainure  
 Grind weld seam on the front in the groove area  
 Levigare il cordone di saldatura anteriormente in corrispondenza della scanalatura



59

Kanten nachfeilen/verputzen  
 Limer/nettoyer les arrêtes  
 File down/clean edges  
 Limare/pulire i bordi

### **Ausführungsbeispiele**

|                                                                    | Seite |
|--------------------------------------------------------------------|-------|
| 1. Ausführungsbeispiele Fussplatten                                | 44    |
| 2. Ausführungsbeispiele Kopfplatten/<br>stirnseitige Befestigungen | 45    |
| 3. Befestigungsbeispiele Fusspunkte                                | 46    |
| 4. Befestigungsbeispiele Kopfpunkte/<br>Zwischendecken             | 47    |
| 5. Abdichtungsbeispiele Fusspunkte/Kopfpunkte                      | 48    |
| 6. Abdichtung Tragkonstruktion                                     | 49    |

### **Design examples**

|                                                 | Page |
|-------------------------------------------------|------|
| 1. Base plate design examples                   | 44   |
| 2. Top plate/front end fixing design examples   | 45   |
| 3. Base point fixing examples                   | 46   |
| 4. Top point/intermediate floor fixing examples | 47   |
| 5. Base point/top point sealing examples        | 48   |
| 6. Sealing of load-bearing structure            | 49   |

### **Exemples d'exécution**

|                                                                          | Page |
|--------------------------------------------------------------------------|------|
| 1. Exemples d'exécution semelles                                         | 44   |
| 2. Exemples d'exécution tôles de<br>recouvrement/fixations en face avant | 45   |
| 3. Exemples de fixation des appuis inférieurs                            | 46   |
| 4. Exemples de fixation appuis supérieurs/<br>plafonds intermédiaires    | 47   |
| 5. Exemples d'étanchéification appuis inférieurs/<br>appuis supérieurs   | 48   |
| 6. Étanchéification de la construction porteuse                          | 49   |

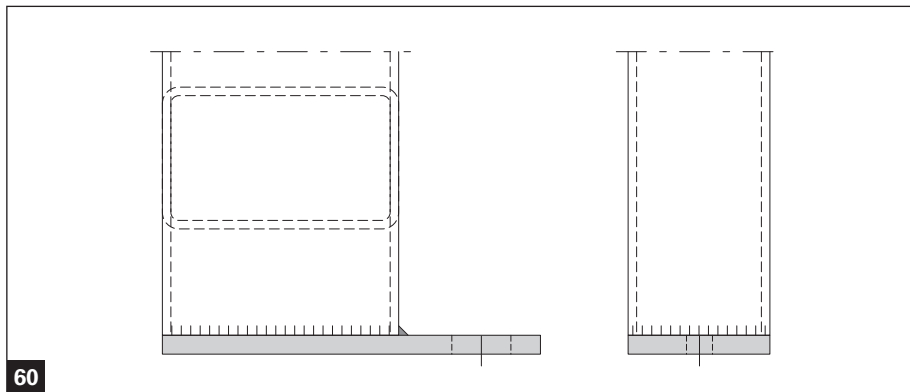
### **Esempi di realizzazione**

|                                                                        | Pagina |
|------------------------------------------------------------------------|--------|
| 1. Esempi di realizzazione delle piastre di base                       | 44     |
| 2. Esempi di realizzazione delle piastre<br>di testa/fissaggi frontali | 45     |
| 3. Esempi di fissaggio dei punti di base                               | 46     |
| 4. Esempi di fissaggio punti di testa/<br>solai intermedi              | 47     |
| 5. Esempi di impermeabilizzazione punti di base/<br>punti di testa     | 48     |
| 6. Impermeabilizzazione struttura portante                             | 49     |

1. Ausführungsbeispiele Fussplatten  
 1. Exemples d'exécution semelles

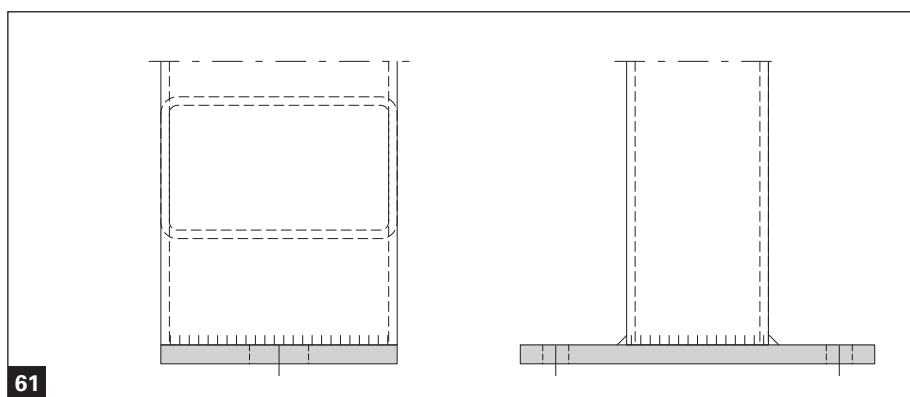
1. Base plate design examples  
 1. Esempi di realizzazione delle piastre di base

Beispiel Fussplatte geschweisst  
 Exemple semelle soudée  
 Example of welded base plate  
 Esempio di piastra di base saldata



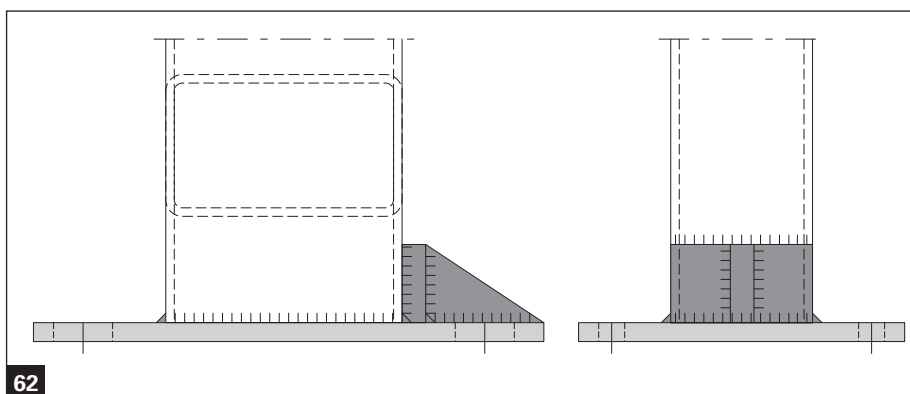
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Beispiel Fussplatte geschweisst  
 Exemple semelle soudée  
 Example of welded base plate  
 Esempio di piastra di base saldata



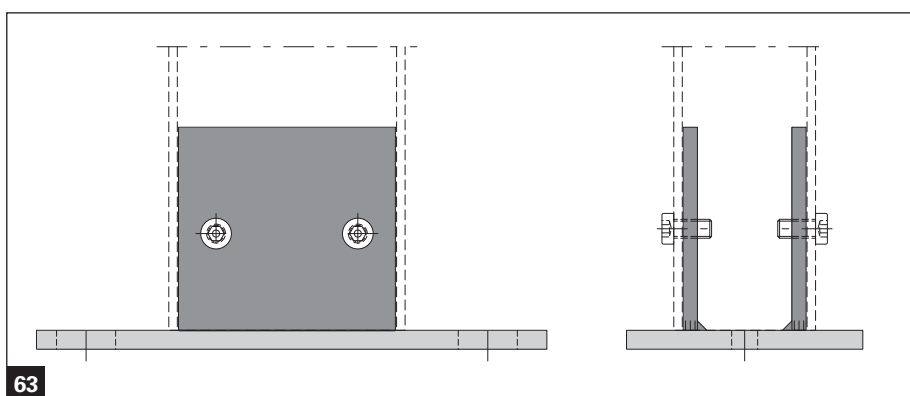
61

Beispiel Fussplatte geschweisst  
 (statisch eingespannt)  
 Exemple semelle soudée  
 (serrée du point de vue statique)  
 Example of welded base plate  
 (structurally fixed)  
 Esempio di piastra di base saldata  
 (con bloccaggio statico)



62

Beispiel Fussplatte  
 gesteckt/geschraubt  
 Exemple semelle  
 emboîtée/vissée  
 Example of  
 pushed-on/screwed-in base plate  
 Esempio di piastra di base  
 innestata/avvitata



63

2. Ausführungsbeispiele Kopfplatten  
 2. Exemples tôles de recouvrement

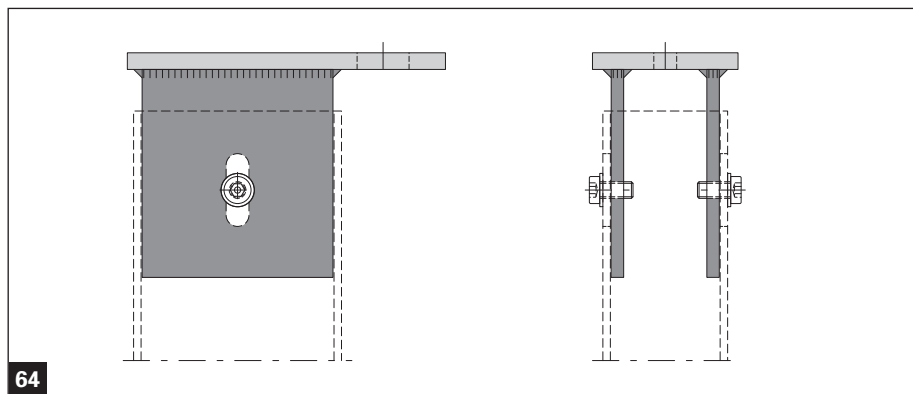
2. Top plate examples  
 2. Esempi di realizzazione delle piastre di testa

Beispiel Kopfplatte für Deckenuntersicht (beweglich)

Exemple tôle de recouvrement pour sous-face du plafond (mobile)

Example of top plate for underside of slab (moveable)

Esempio di piastra di testa per lato inferiore solaio (amovibile)



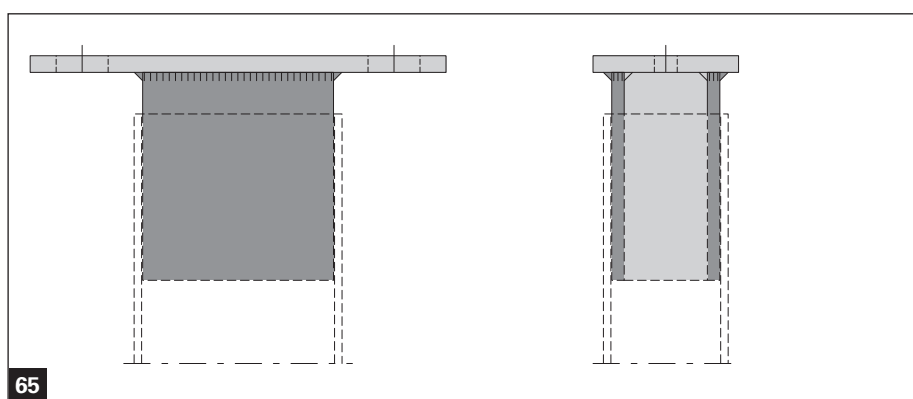
64

Beispiel Kopfplatte für Deckenuntersicht (beweglich)

Exemple tôle de recouvrement pour sous-face du plafond (mobile)

Example of top plate for underside of slab (moveable)

Esempio di piastra di testa per lato inferiore solaio (amovibile)



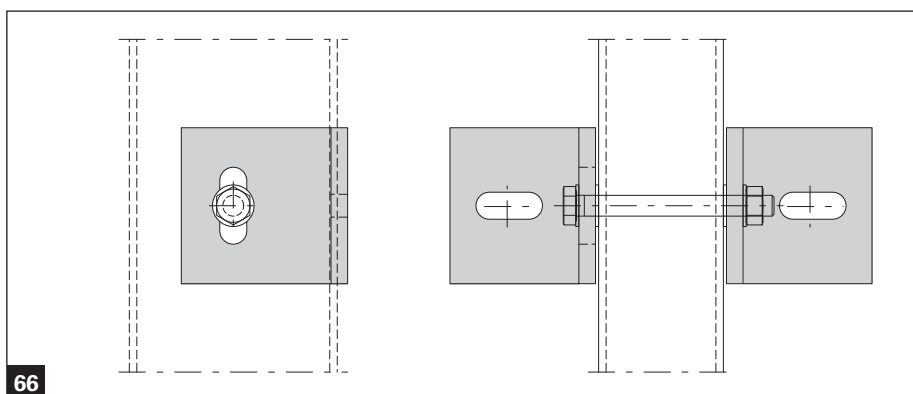
65

Beispiel Befestigung auf Deckenstirnseite (beweglich)

Exemple fixation sur face avant du plafond (mobile)

Example of fastening on front side of slab (moveable)

Esempio di fissaggio su lato frontale solaio (amovibile)



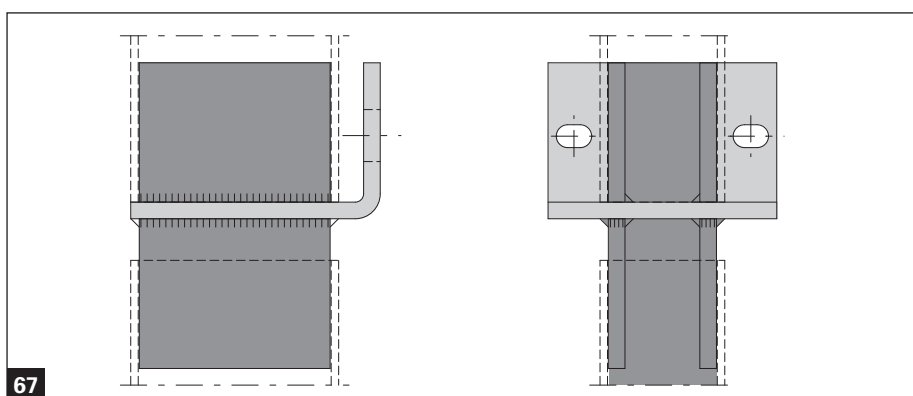
66

Beispiel Befestigung auf Fix- und Lospunkt – Deckenstirnseite

Exemple fixation sur (point fixe et point non fixe – face avant du plafond)

Example of fastening on fixing point and sliding bearing point – front side of slab

Esempio di fissaggio su – 1 punto fisso e 1 mobile lato frontale solaio



67

3. Befestigungsbeispiele Fusspunkte  
 3. Exemples de fixation appuis inférieurs

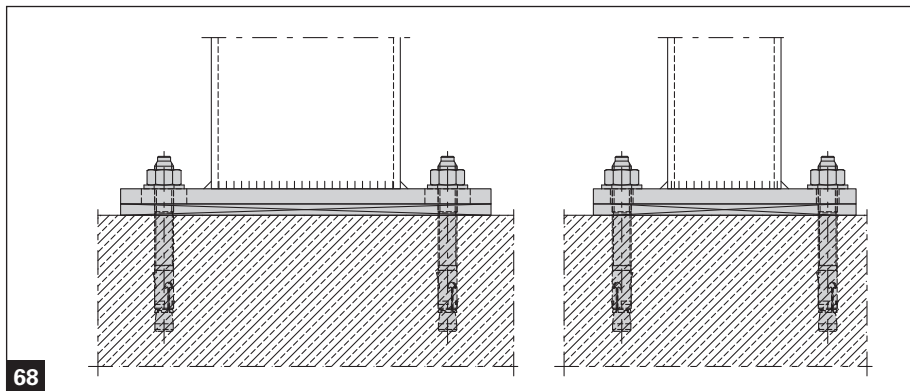
3. Base point fixing examples  
 3. Esempi di fissaggio dei punti di base

Beispiel Fusspunkt auf  
 Betonboden montiert

Exemple appui inférieur monté  
 sur plancher en béton

Example of base point mounted  
 on concrete floor

Esempio punto di base montato  
 su fondo in cs



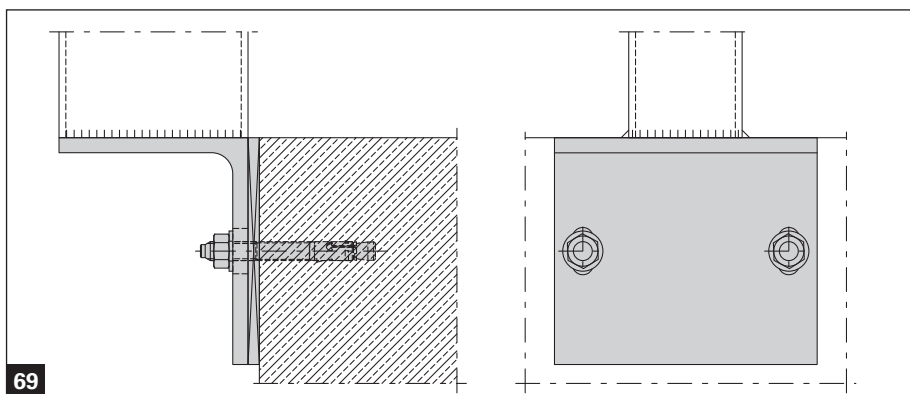
68

Beispiel Fusspunkt auf  
 Betonstirnseite montiert

Exemple appui inférieur monté  
 sur face avant en béton

Example of base point mounted  
 on front side of concrete

Esempio punto di base montato  
 su lato frontale in cs



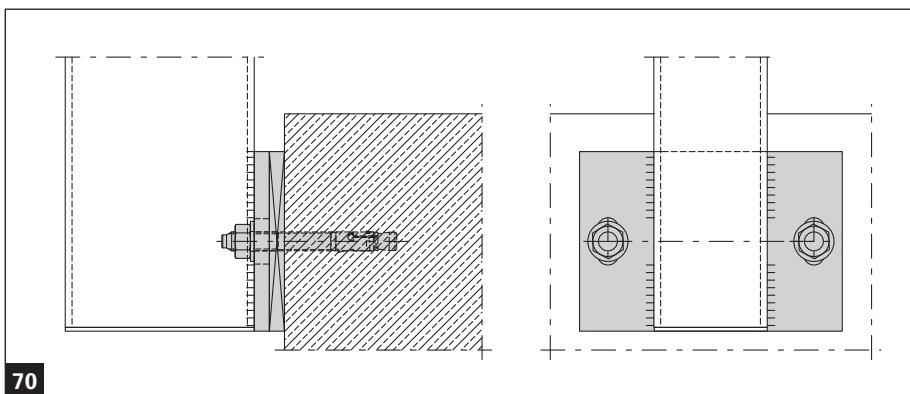
69

Beispiel Fusspunkt auf  
 Betonstirnseite montiert

Exemple appui inférieur monté  
 sur face avant en béton

Example of base point mounted  
 on front side of concrete

Esempio punto di base montato  
 su lato frontale in cs



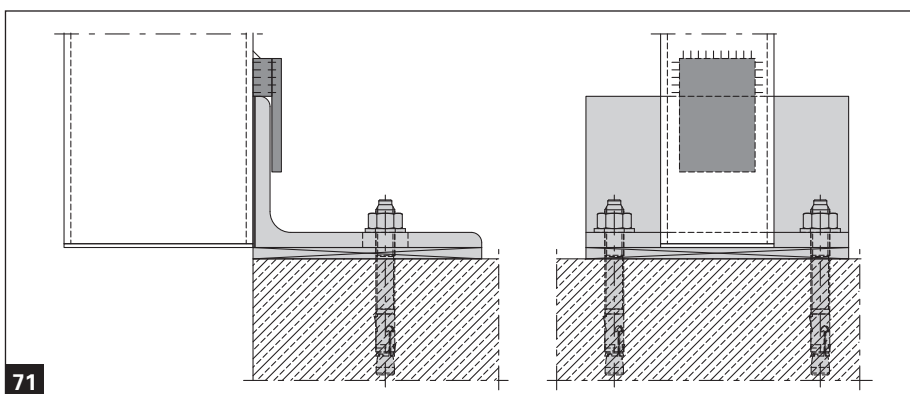
70

Beispiel Fusspunkt einhängbar  
 (auf vormontierte Winkelplatte)

Exemple appui inférieur à suspendre  
 (sur plaque angulaire pré-montée)

Example of clip-in base point  
 (on pre-assembled angle plate)

Esempio punto di base a incastro  
 (su piastra angolare premontata)



71

4. Befestigungsbeispiele Kopfpunkte / Zwischendecken  
 4. Exemples de fixation appuis supérieurs/  
 plafonds intermédiaires

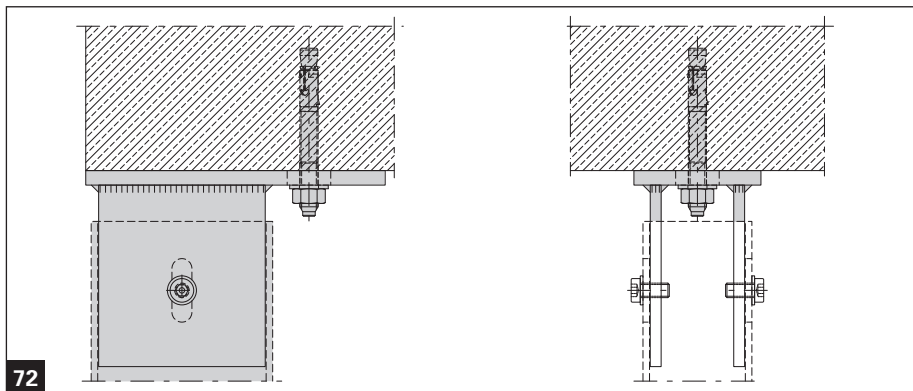
4. Top points/intermediate floor fixing examples  
 4. Esempi di fissaggio punti di testa/solai intermedi

Beispiel Kopfplatte auf  
 Deckenuntersicht montiert

Exemple tôle de recouvrement  
 montée sur sous-face du plafond

Example of top plate mounted  
 on underside of slab

Esempio punto di testa montato  
 su lato inferiore solaio



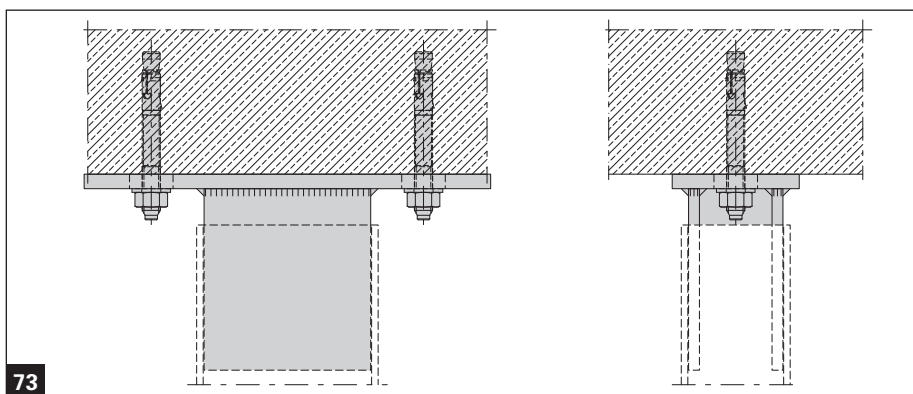
72

Beispiel Kopfplatte auf  
 Deckenuntersicht montiert

Exemple tôle de recouvrement  
 montée sur sous-face du plafond

Example of top plate mounted  
 on underside of slab

Esempio punto di testa montato  
 su lato inferiore solaio



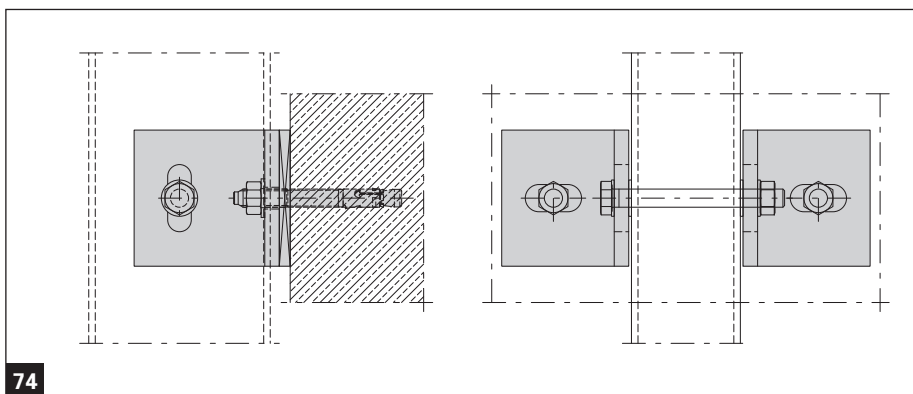
73

Beispiel Befestigung auf Betondecken-  
 Stirnseite (Durchlaufträger)

Exemple fixation sur face avant  
 de plafond en béton (poutre continue)

Example of fixing on front side of  
 concrete slab (continuous beam)

Esempio di fissaggio su lato  
 frontale solaio in cs (amovibile)



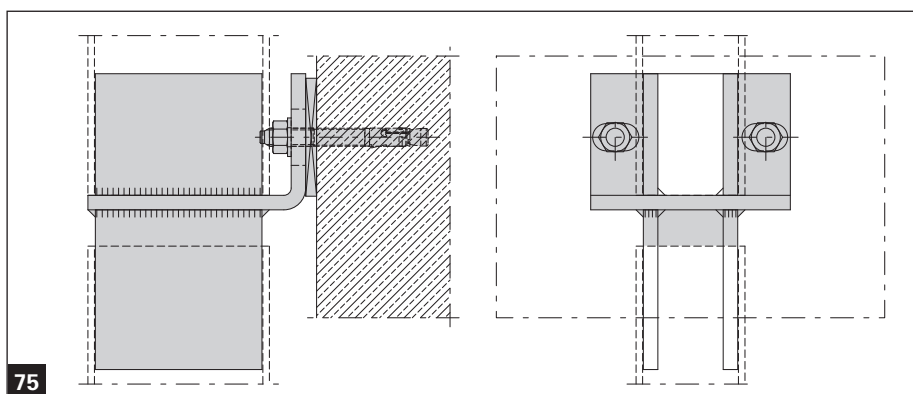
74

Beispiel Befestigung auf Betondecken-  
 Stirnseite (Fix- und Lospunkt)

Exemple fixation en face avant  
 de plafond en béton (point fixe et point  
 non fixe)

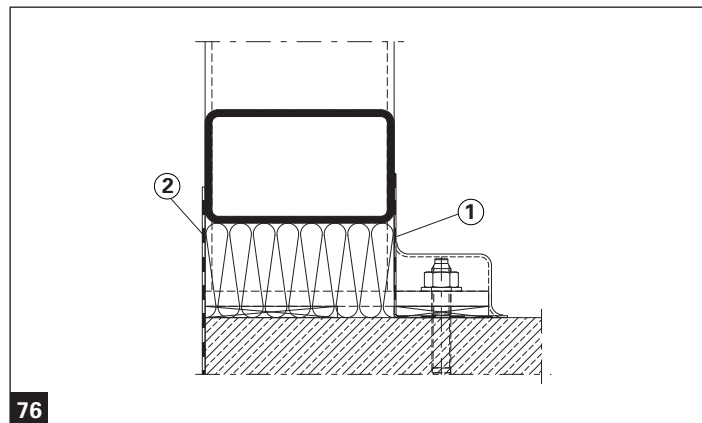
Example of fixing on front side  
 of concrete slab (fixing point and  
 sliding bearing point)

Esempio di fissaggio su lato frontale  
 solaio in cs (1 punto fisso e 1 mobile)

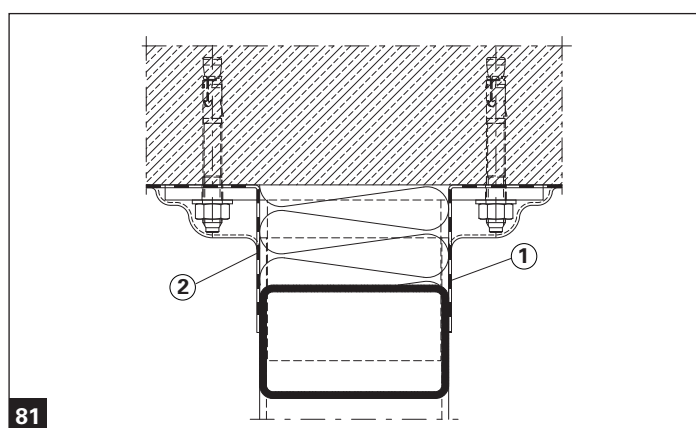
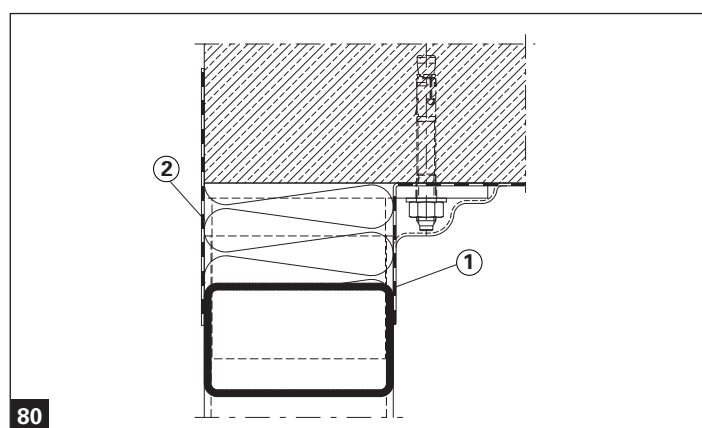
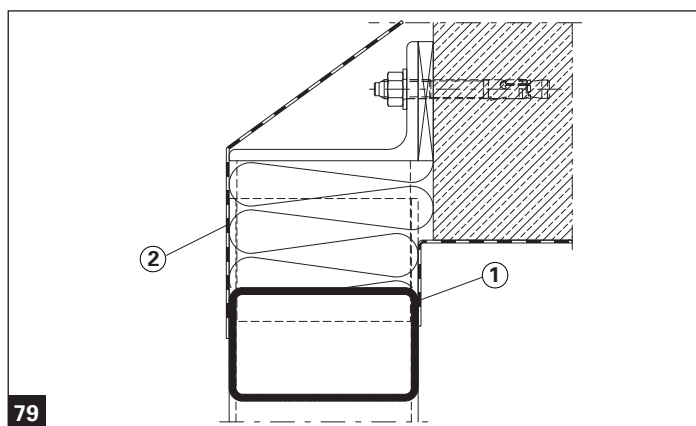
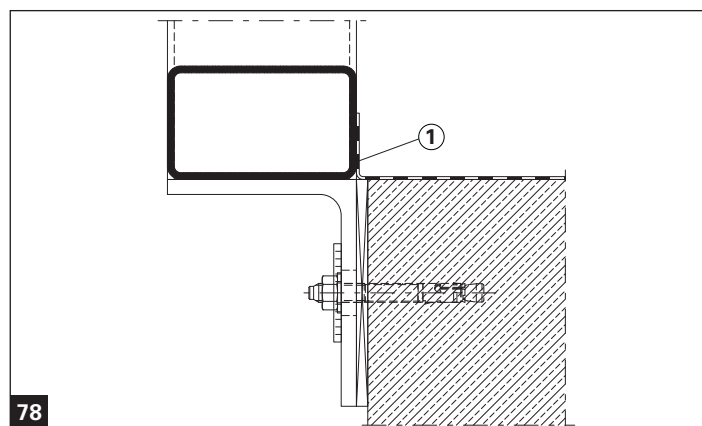
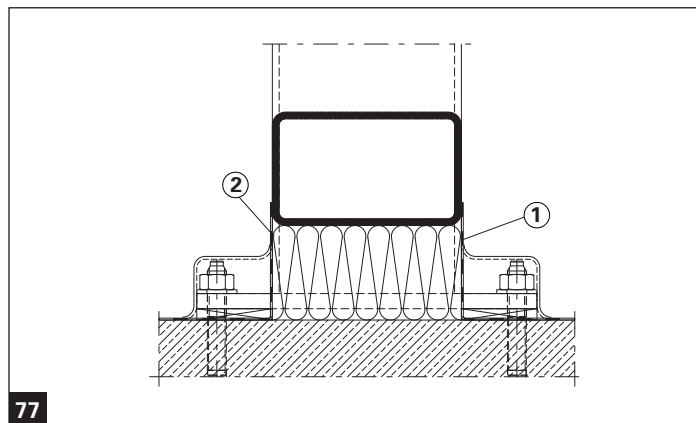


75

5. *Abdichtungsbeispiele Fusspunkte / Kopfpunkte*  
 5. *Exemples d'étanchéification appuis inférieurs/ appuis supérieurs*



5. *Base point/top point sealing examples*  
 5. *Esempi di impermeabilizzazione punti di base/ punti di testa*



- ① Innenbereich:  
Abdichtung dampfdiffusions- und luftdicht
- ② Aussenbereich:  
Abdichtung dampfdiffusionsoffen, schlagregendicht

- ① Interior:  
Vapour-proof and airtight seal
- ② Exterior:  
Moisture-permeable, watertight seal

- ① Intérieur:  
imperméable à la diffusion de vapeur et à l'air
- ② Extérieur:  
perméable à la diffusion de vapeur, étanche à la pluie battante

- ① Area interna:  
tenuta antidiffusione vapore e all'aria
- ② Area esterna:  
tenuta permeabile al vapore, tenuta all'acqua

#### 6. Abdichtung Tragkonstruktion

Nach der Montage der VISS Basic-Tragkonstruktion am Bau sollte der Einbau der Glaselemente grundsätzlich möglichst rasch erfolgen. Ist dies aus verschiedenen Gründen nicht möglich, so sollte die Tragkonstruktion bei schlechter Witterung mittels Planen abgedeckt werden. Dies gilt besonders bei exponierten, der Witterung ausgesetzten, Fassadenkonstruktionen.

Vor der Montage der Innendichtungen resp. vor dem Glaseinbau prüfen, ob sich allenfalls Wasser im Riegelhohlraum befindet. Falls ja, Wasser/Feuchtigkeit ausblasen resp. trocknen (Abb. 01/02).

#### 6. Étanchéification de la construction porteuse

Les éléments de vitrage devraient toujours être montés rapidement après l'installation de la construction porteuse VISS Basic. Si cela est impossible pour différentes raisons, la construction porteuse devrait être recouverte de bâches en cas de mauvais temps. Cela est en particulier le cas pour les constructions de façade soumises aux intempéries. Contrôler avant de monter les joints intérieurs et le vitrage si de l'eau se trouve dans la cavité de la traverse. Si cela est le cas, éliminer l'eau/l'humidité par soufflage et sécher (Fig. 01/02).

#### 6. Sealing of load-bearing structure

After installation of the VISS Basic load-bearing structure on site, the glass units must always be installed as quickly as possible. If this is not possible for various reasons, the load-bearing structure must be covered by tarpaulin in case of bad weather. This applies in particular to façade constructions that are exposed to the weather. Before installation of the internal gaskets or before installing the glass, check whether there is water in the transom hollow space. If so, blow out or dry the water/moisture (Fig. 01/02).

#### 6. Impermeabilizzazione struttura portante

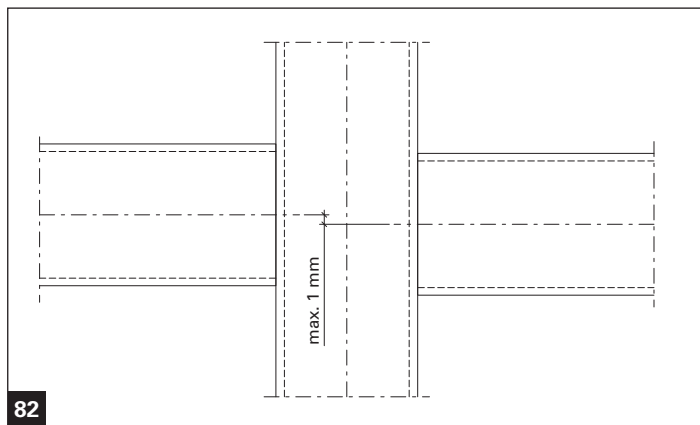
Dopo il montaggio della struttura portante VISS Basic alla muratura dovrebbe seguire, il più presto possibile, quello degli elementi in vetro. Se questo non dovesse essere possibile, per svariati motivi, si dovrà provvedere, in caso di maltempo, a coprire la struttura portante con dei teli. Quanto detto vale in particolare per facciate esposte ai fenomeni atmosferici.

Prima di montare le guarnizioni interne o i vetri, verificare l'eventuale presenza di acqua nelle cavità del traverso. In caso affermativo soffiare via l'acqua/l'umidità o asciugarla (fig. 01/02).

## Versatz

## Décalage

Versatz im Kreuzpunkt  
Décalage au point d'intersection



82

## Offset

## Disassamento

Offset in intersection  
Disassamento in corrispondenza del punto di intersezione

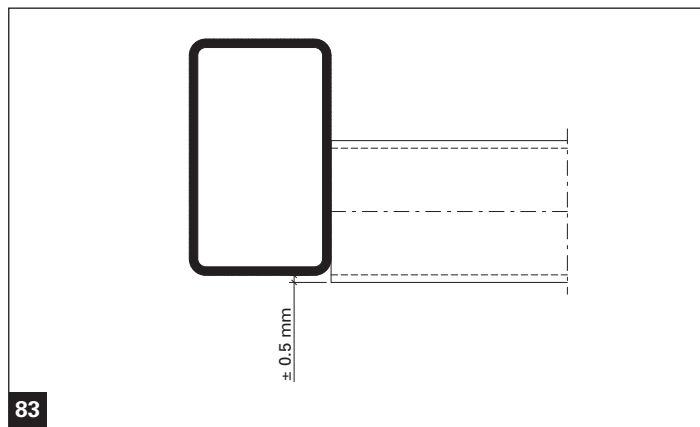
Beim Versatz im Kreuzpunkt wird von der Profilachse ausgegangen. Diese darf zwischen den Riegeln links und rechts des Kreuzpunktes max. 1 mm abweichen.

Le décalage au point d'intersection se calcule à partir de l'axe du profilé. Ce dernier ne doit diverger que de 1 mm max. entre les traverses sur la gauche et la droite du point d'intersection.

The offset in the intersection is based on the profile axis. This may deviate between the transoms to the left and right of the intersection by a maximum of 1 mm.

In caso di disassamento nel punto di intersezione il riferimento è l'asse del profilo, il cui scostamento, a sinistra e a destra del punto di intersezione, non può essere maggiore di 1 mm.

Profilübergang Kreuzpunkt  
Alignement au point d'intersection



83

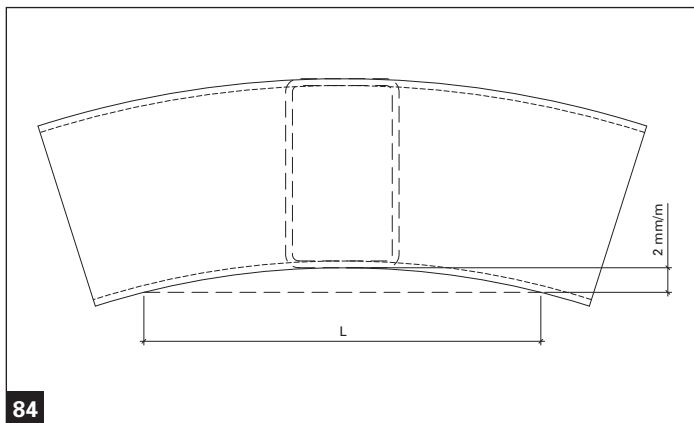
Profile transfer intersection  
Passaggio tra profili nel punto di intersezione

Für die Gewährleistung eines gleichmässigen Anpressdruckes darf dieser Versatz max.  $\pm 0,5$  mm betragen. Der Anpressdruck hat einen direkten Einfluss auf die Dichtigkeit der Konstruktion.

Ce décalage ne doit pas être supérieur à  $\pm 0,5$  mm afin de garantir une pression d'appui régulière. La pression d'appui a une influence directe sur l'étanchéité de la construction.

To ensure an even contact pressure, this offset may be a maximum of  $\pm 0.5$  mm. The contact pressure has a direct influence on the weathertightness of the construction.

Per garantire una pressione di contatto omogenea questo disassamento non può superare il valore massimo di  $\pm 0,5$  mm. La pressione di contatto influisce direttamente sull'ermeticità della struttura.



84

#### Geradheit der Profile:

Die Abweichung bei der Geradheit der Profile darf max. 2 mm pro Meter betragen.

#### Rectitude des profilés:

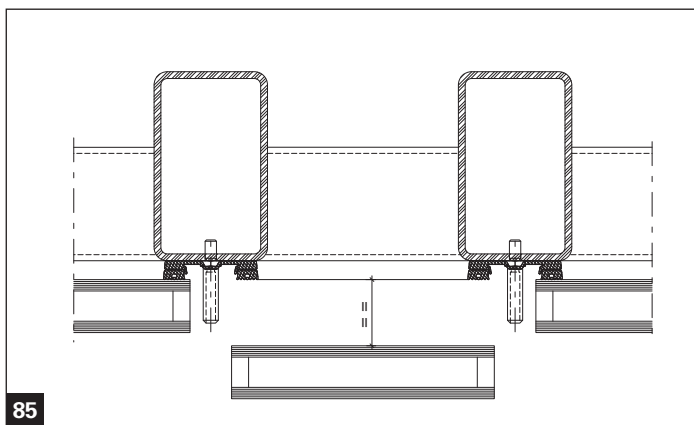
La divergence de rectitude des profilés ne doit pas être supérieure à 2 mm par mètre.

#### Straightness of the profiles:

The deviation in the straightness of the profiles must be no more than 2 mm per metre.

#### Rettilineità dei profili:

Lo scostamento dalla rettilineità dei profili può essere di max. 2 mm al metro.



85

#### Planheit der Ebene:

Grundsätzlich müssen die Profile in der Ebene plan sein um einen gleichmässigen Anpressdruck zu erhalten. Ist dies nicht der Fall, entstehen zwangsläufig Spannungen in den Glasscheiben, die je nach Grösse bis zum Glasbruch führen können.

#### Planéité de la surface:

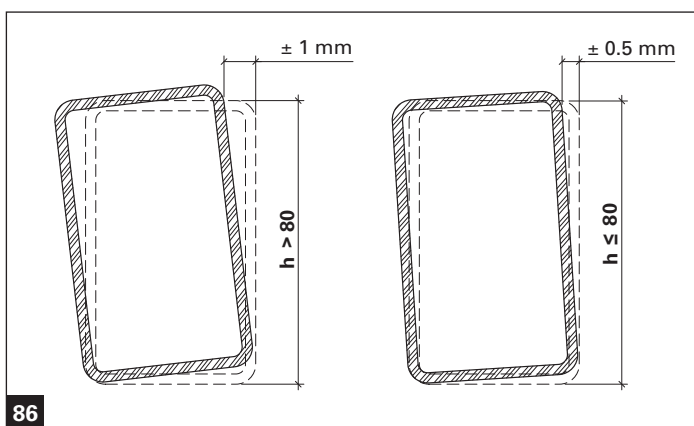
La surface des profilés doit toujours être plane pour qu'une pression de serrage homogène puisse être obtenue. Si cela n'est pas le cas, des tensions apparaissent inévitablement dans les vitres qui, selon leur intensité, peuvent finir par les rompre.

#### Flatness of the plane:

As a basic principle, the profiles must be flat in the plane in order to receive a uniform contact pressure. If this is not the case, stresses will inevitably occur in the glass panes which, depending on their size, may even lead to the glass breaking.

#### Planarità del piano:

In linea di principio i profili devono essere planari rispetto al piano perché la pressione di contatto sia omogenea. In caso contrario si creano inevitabilmente tensioni nelle lastre di vetro che variano in funzione delle loro dimensioni e possono causarne la rottura.



86

#### Verdrehung der Profile:

Die Verdrehung der Profile ist massgebend für die Gewährleistung eines gleichmässigen Anpressdruckes und folglich für die Dichtigkeit des Systems.

#### Torsion des profilés:

La torsion des profilés est déterminante pour garantir une pression de serrage homogène et donc l'étanchéité du système.

#### Torsion of the profiles:

The torsion of the profiles is decisive for ensuring a uniform contact pressure and thus ultimately the weathertightness of the system.

#### Torsione dei profili:

La torsione dei profili è determinante per garantire una pressione di contatto omogenea e di conseguenza l'ermeticità del sistema.





Jansen AG

**Steel Systems**  
Industriestrasse 34  
9463 Oberriet  
Schweiz  
[jansen.com](http://jansen.com)