



# CONTENTS AND OVERVIEW OF PANELS AND SYSTEMS

Section	Page
3 Panels and systems	
Fiber-cement	4
High-pressure laminate (HPL)	11
Metal cladding material	18
Render	24
Ceramic	28
Terracotta	34
Stone	38
Composite	42



## FIBER-CEMENT

Fiber-cement is a composite material composed of sand, cement and cellulose

















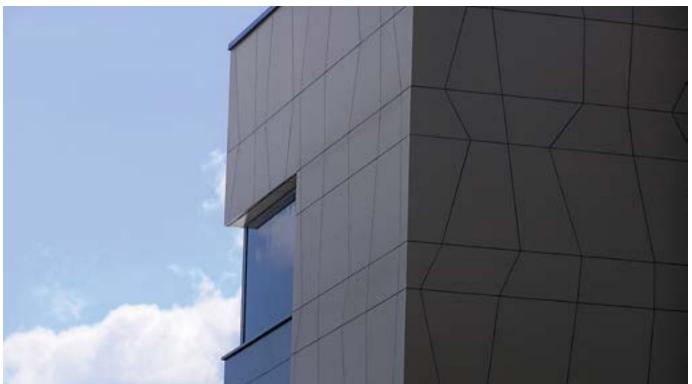




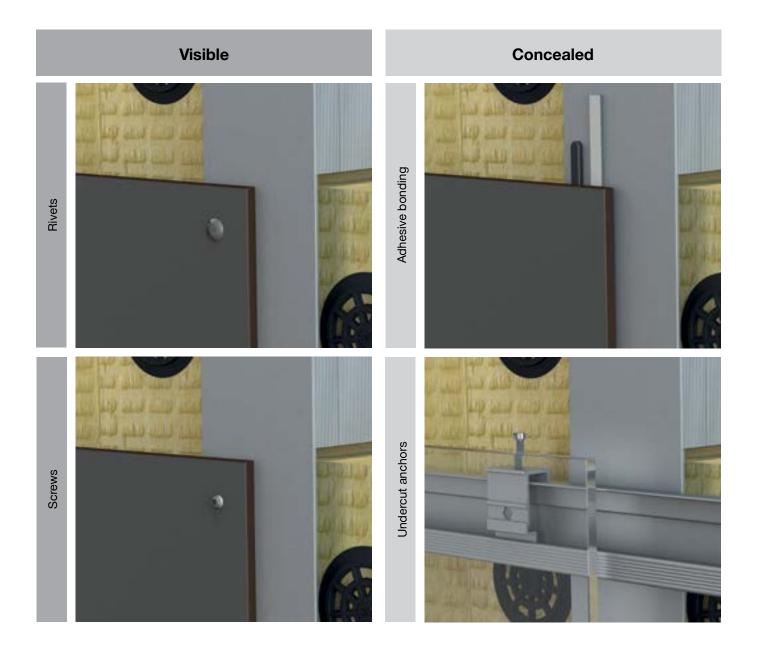


Composite





## FIBER-CEMENT - PANEL FASTENING

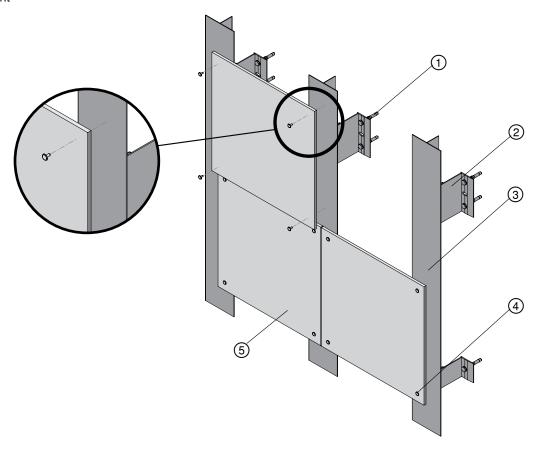






#### FIBER-CEMENT - VISIBLE RIVETS

Fiber-cement





MFI-bracket



FOX VT-bracket



FOX H-bracket

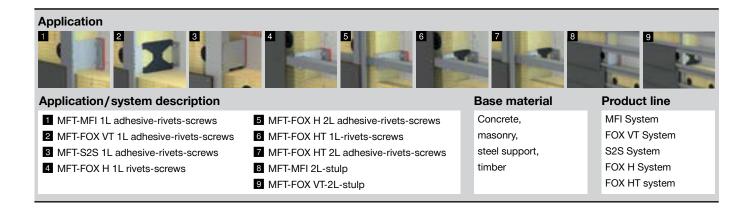


FOX HT-bracket

Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Rivet	Others	
(5)	Fiber-cement panel	Others	



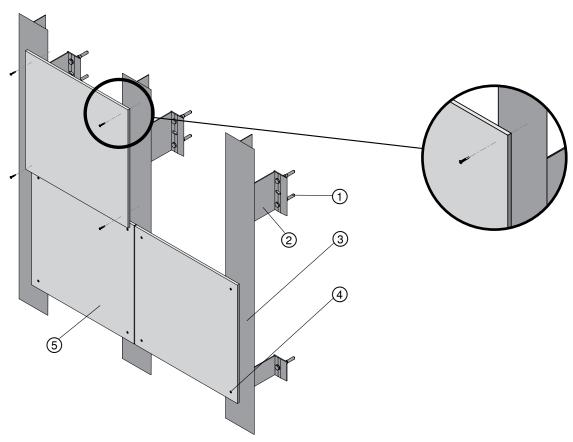
S2S-bracket



### FIBER-CEMENT - VISIBLE SCREWS



Fiber-cement



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Screw	Others	
(5)	Fiber-cement panel	Others	



MFI-bracket



EOX H-bracke



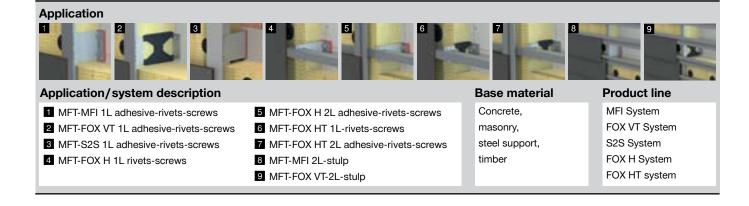
FOX VT-bracket



FOX HT-bracket



S2S-bracket

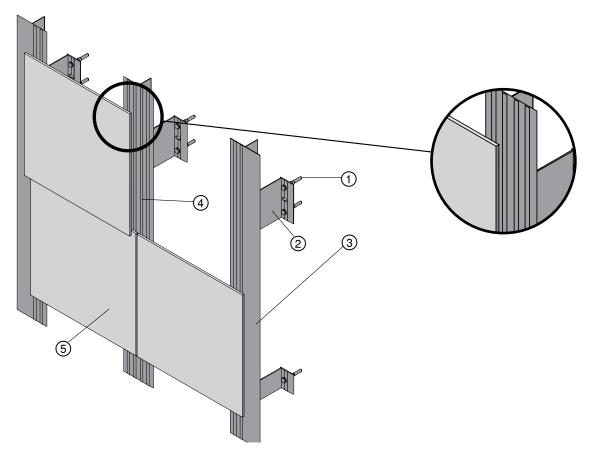






# FIBER-CEMENT – CONCEALED ADHESIVE BONDING

Fiber-cement





MFI-bracket



FOX VT-bracket



FOX H-bracket



FOX HT-bracket

(5)

Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Adhesive bonding material	Others	

Others

Fiber-cement panel



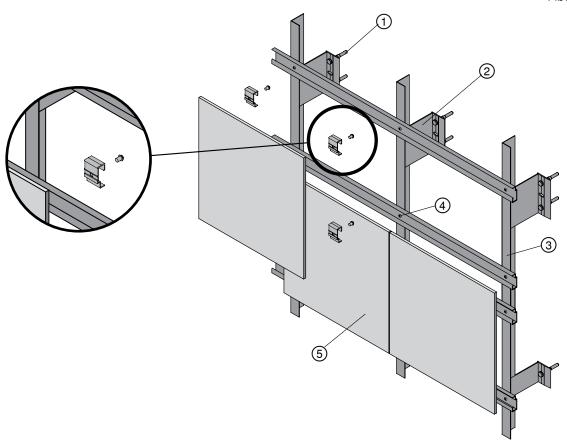
S2S-bracket

Application  2  3  3	5		
Application/system description		Base material	Product line
<ol> <li>MFT-MFI 1L adhesive-rivets-screws</li> <li>MFT-FOX VT 1L adhesive-rivets-screws</li> <li>MFT-S2S 1L adhesive-rivets-screws</li> <li>MFT-FOX H 1L adhesive rivets-screws</li> </ol>	5 MFT-FOX HT 2L adhesive-rivets-screws	Concrete, masonry, steel support, timber	MFI System FOX VT System S2S System FOX H System FOX HT system

# FIBER-CEMENT – CONCEALED UNDERCUT ANCHORS



Fiber-cement



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Hanger and undercut anchor	Hilti	
5	Fiber-cement panel	Others	



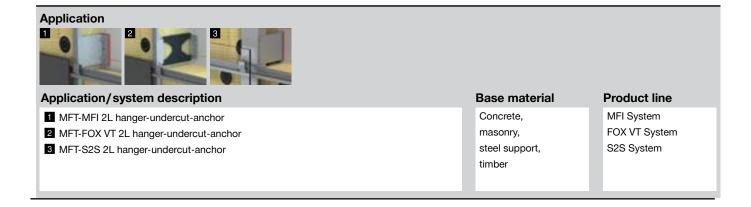
MFI-bracket

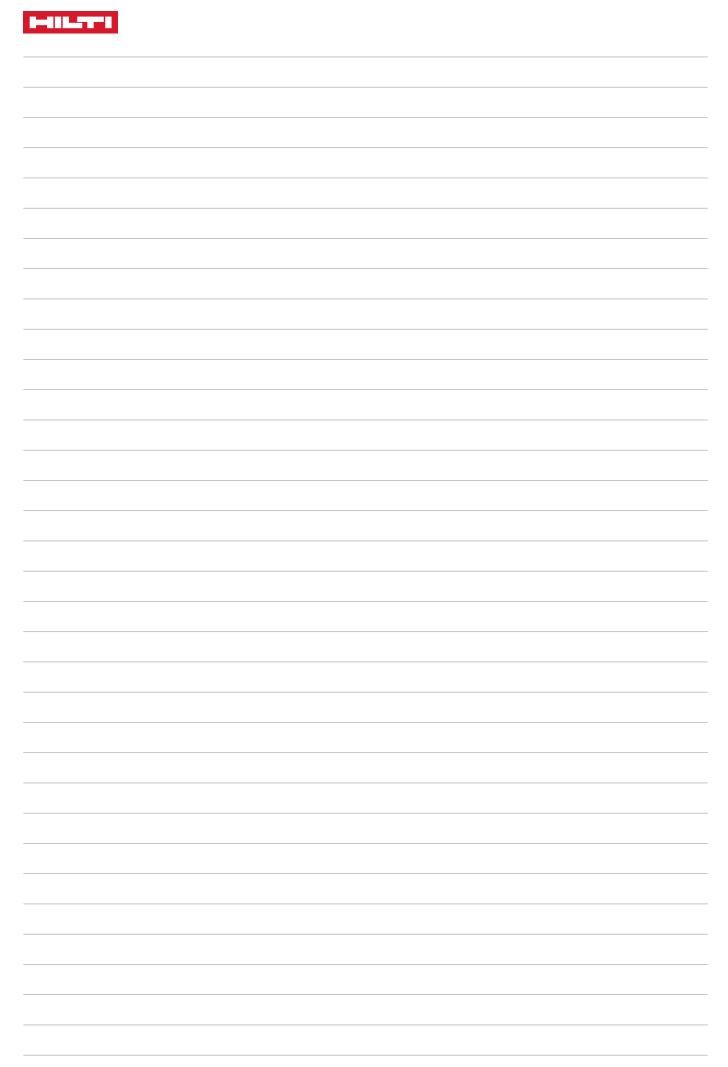


FOX VT-bracket



S2S-bracket





# HIGH-PRESSURE LAMINATE (HPL)

High-pressure laminate (HPL) is composed of resin, impregnated paper layers, a decorative paper layer and clear melamin overlay. These sheets are bonded at high pressure and temperature.

















Fiber-cement

Metal

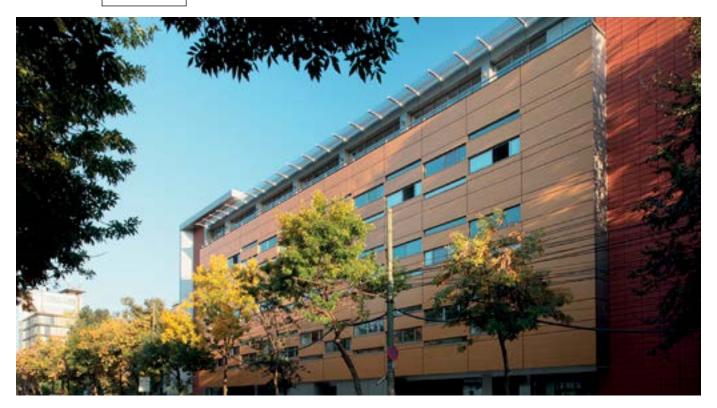
Render

Ceramic

Terracotta

Stone

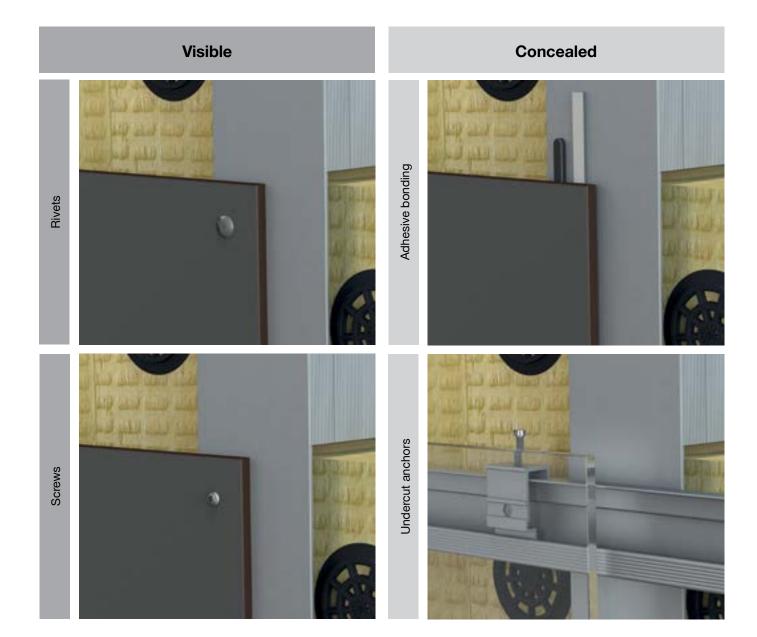
Composite







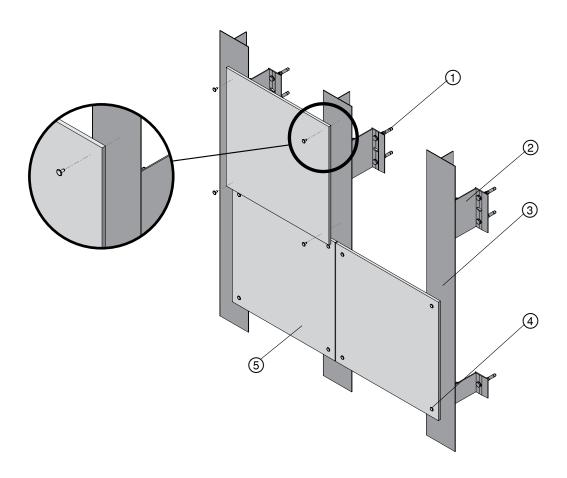
# HIGH-PRESSURE LAMINATE (HPL) – PANEL FASTENING



#### **HPL - VISIBLE RIVETS**



HPL



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Rivet	Others	
(5)	HPL panel	Others	



MFI-bracket



FOX H-bracket



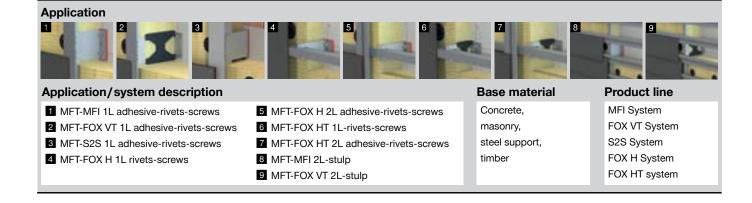
FOX VT-bracket



FOX HT-bracket



S2S-bracket

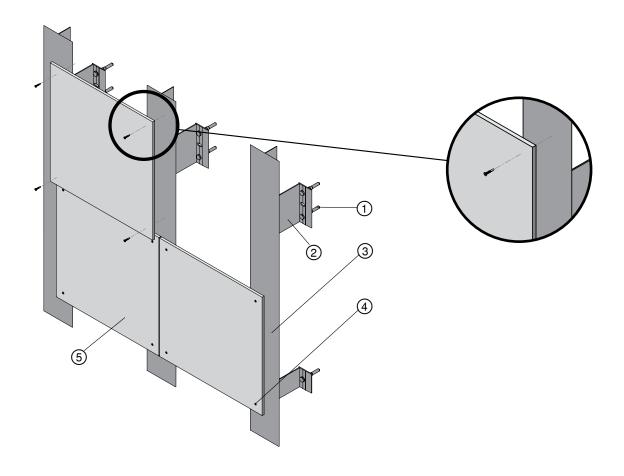






#### **HPL - VISIBLE SCREWS**







MFI-bracket



FOX VT-bracket



FOX H-bracket

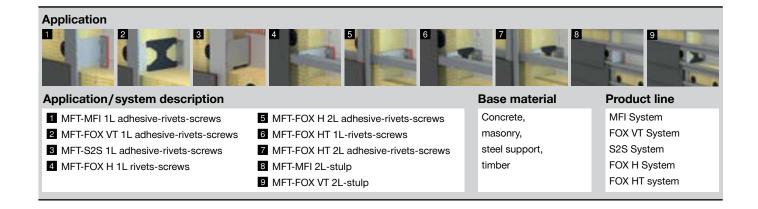


FOX HT-bracket

Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Screw	Others	
(5)	HPL panel	Others	



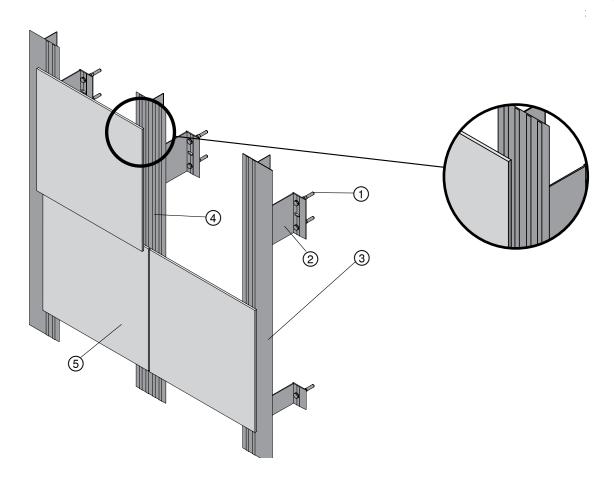
S2S-bracket



## HPL - CONCEALED ADHESIVE BONDING



HPL



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Adhesive bonding material	Others	
(5)	HPL panel	Others	



MFI-bracket



FOX H-bracke



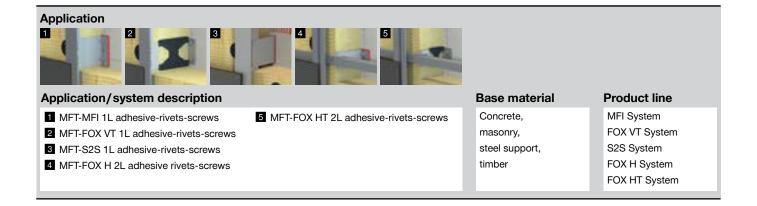
FOX VT-bracket



FOX HT-bracket



S2S-bracket

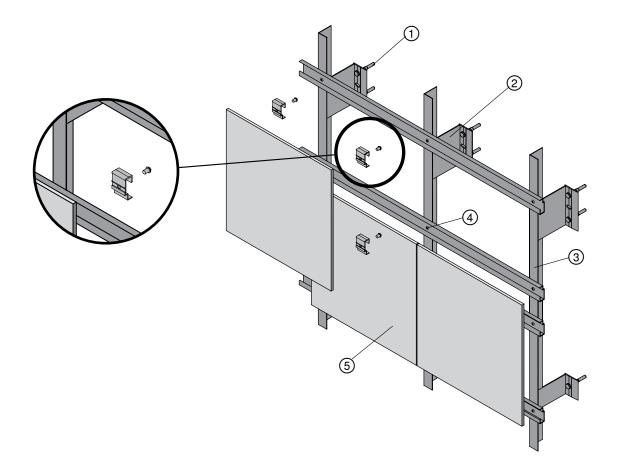






## HPL

### HPL - CONCEALED UNDERCUT ANCHORS





MFI-bracket

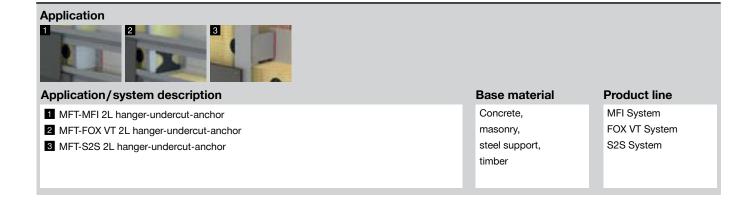


FOX VT-bracket



S2S-bracket

Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Hanger and undercut anchor	Hilti	
(5)	HPL panel	Others	



Ventilated Facades –   Panels and Systems



### METAL CLADDING MATERIAL

The metal cladding material can be aluminum, stainless steel, copper or steel. These cladding materials are typically fabricated from thin metal sheets.

















Fiber-cement

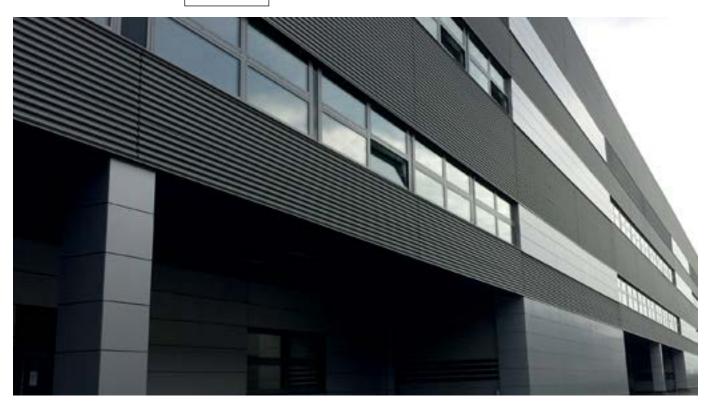
Render

Ceramic

Terracotta

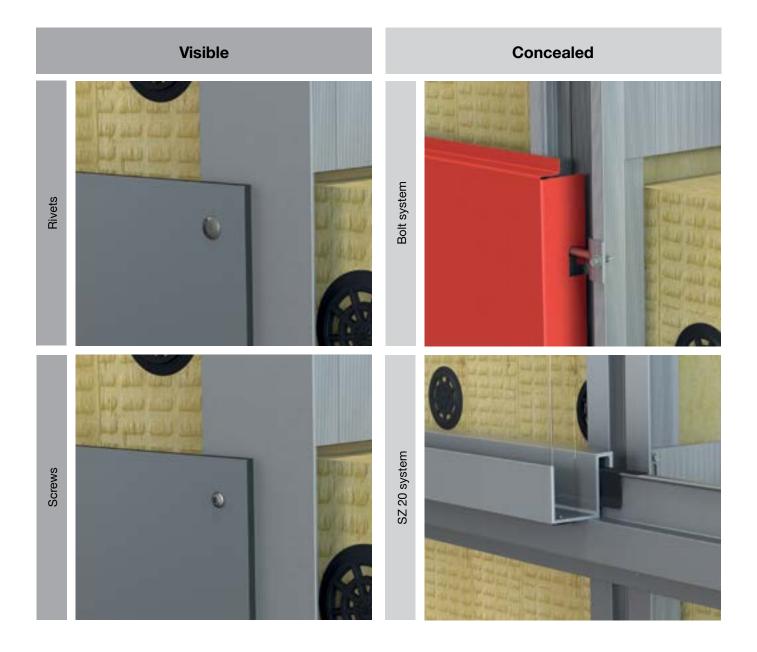
Stone

Composite





# METAL CLADDING MATERIAL – PANEL FASTENING

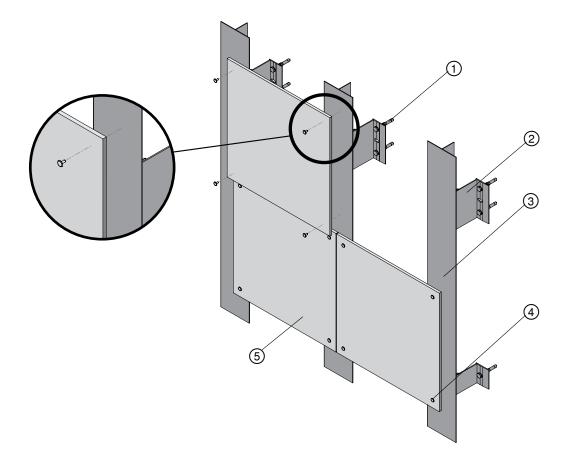






#### Metal

# METAL CLADDING MATERIAL – VISIBLE RIVETS





MFI-bracket



FOX VT-bracket



FOX H-bracket

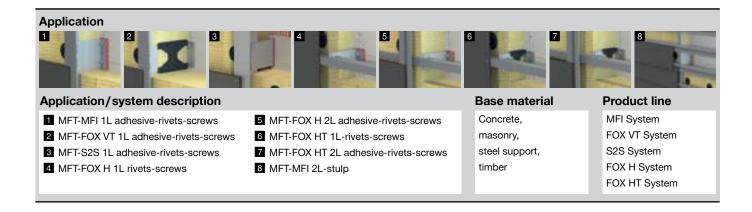


FOX HT-bracket

Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Rivet	Others	
(5)	Metal sheet	Others	



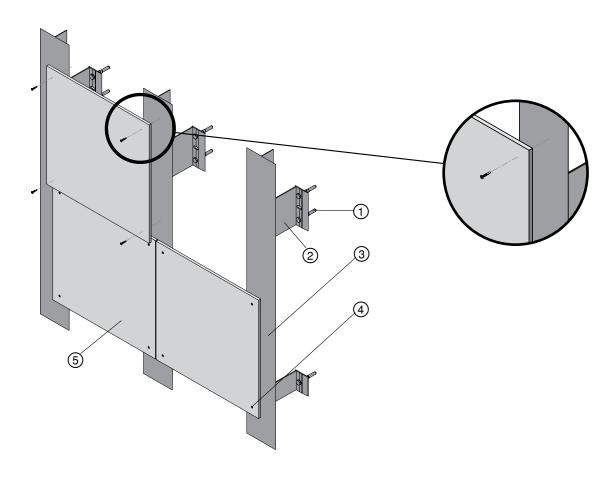
S2S-bracket



# METAL CLADDING MATERIAL – VISIBLE SCREWS



Metal



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Screw	Others	
(5)	Metal sheet	Others	



MFI-bracket



FOX H-bracket

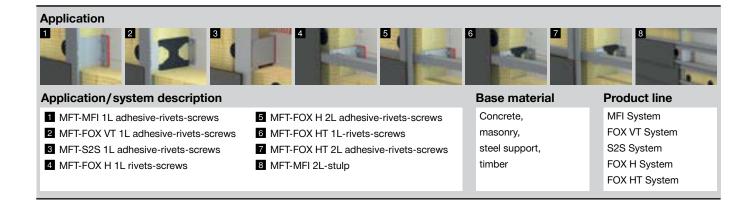


FOX VT-bracket



FOX HT-bracket



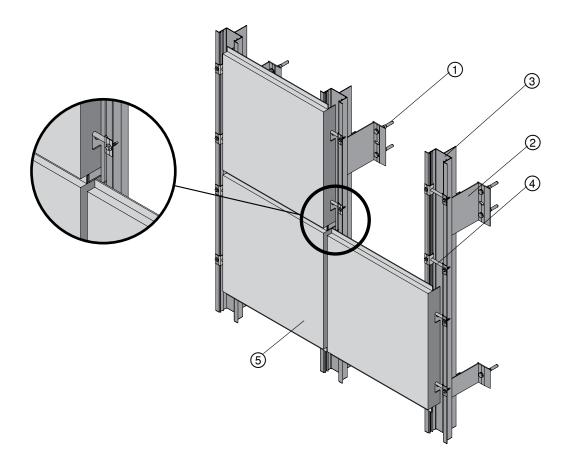






#### Metal

# METAL CLADDING MATERIAL – CONCEALED BOLT SYSTEM



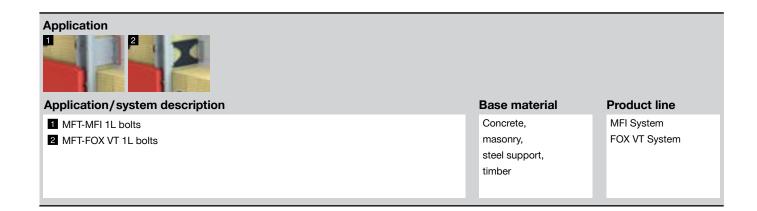


MFI-bracket



FOX VT-bracket

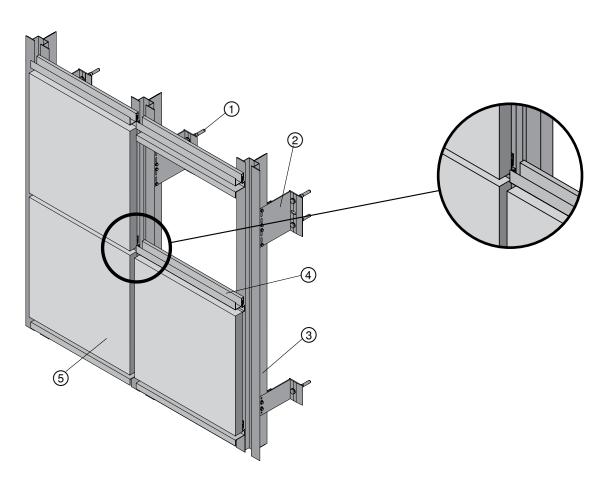
Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Bolt system	Hilti	
(5)	Metal sheet	Others	



# METAL CLADDING MATERIAL – CONCEALED SZ20 SYSTEM

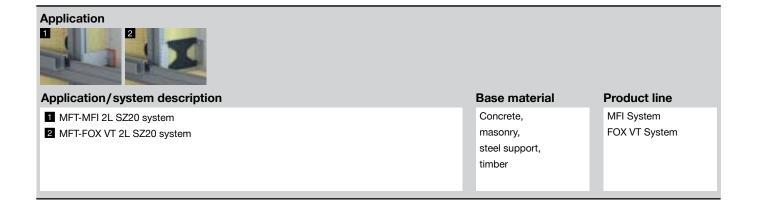


Metal



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	SZ20 system	Hilti	
5	Metal sheet	Others	







### **RENDER**

The base for the cladding material is a cement board. After the cement board is installed a layer of **render** is applied.

















Fiber-cement

HPL

Metal

Render

er Cerar

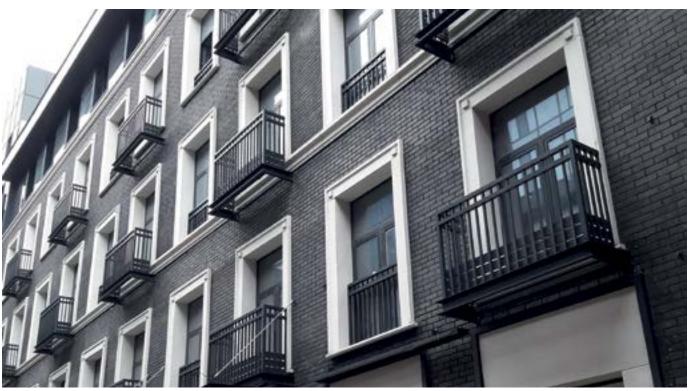
Ceramic

Terracotta

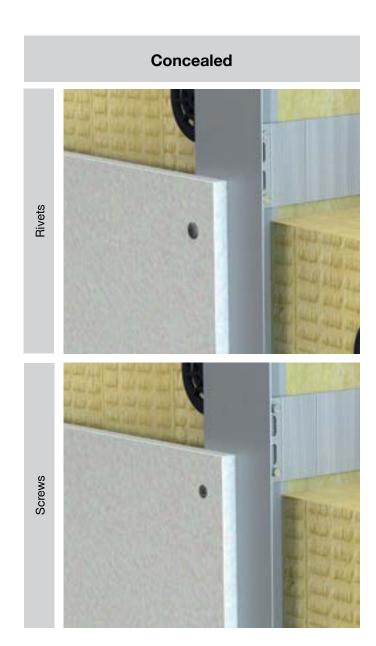
Stone

Composite





# **RENDER - PANEL FASTENING**

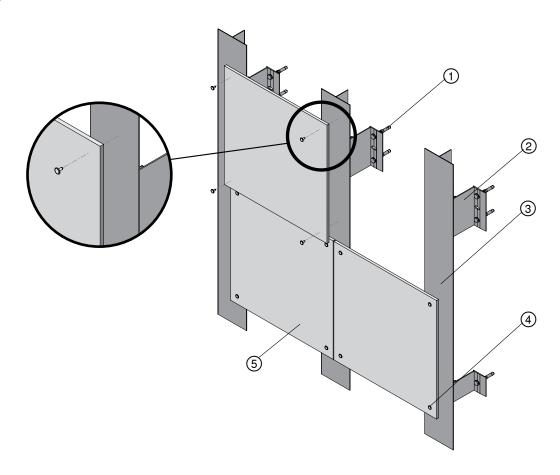






### **RENDER - CONCEALED RIVETS**

Render





MFI-bracket



FOX VT-bracket



FOX H-bracket

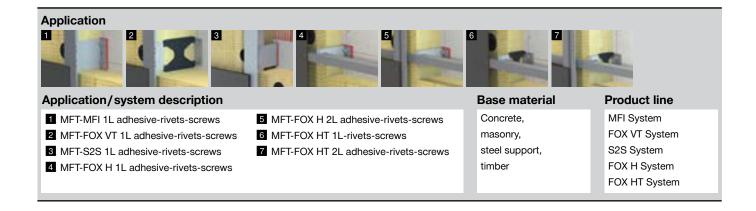


FOX HT-bracket

Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Rivet	Others	
(5)	Render panel	Others	



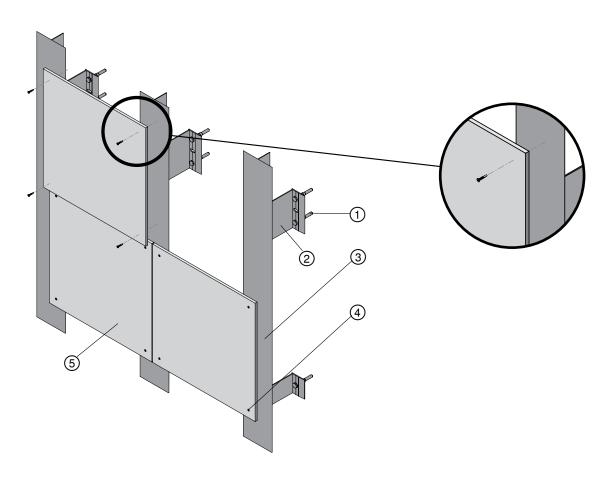
S2S-bracket



### **RENDER - CONCEALED SCREWS**



Render



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Screw	Hilti	
5	Render panel	Others	



MFI-bracket



EOX H-bracket



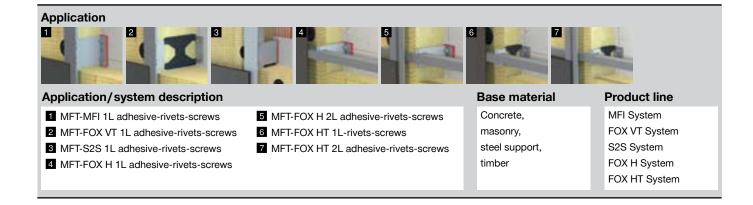
FOX VT-bracket



FOX HT-bracket



S2S-bracket





## **CERAMIC**

Ceramics are composed of natural materials such as quartz, clay, granite and ceramic pigments.

















Fiber-cement

Metal

Render

Ceramic

Terracotta

Stone

Composite





# **CERAMIC - PANEL FASTENING**

### Visible



#### Concealed



Undercut anchors

Adhesive bonding





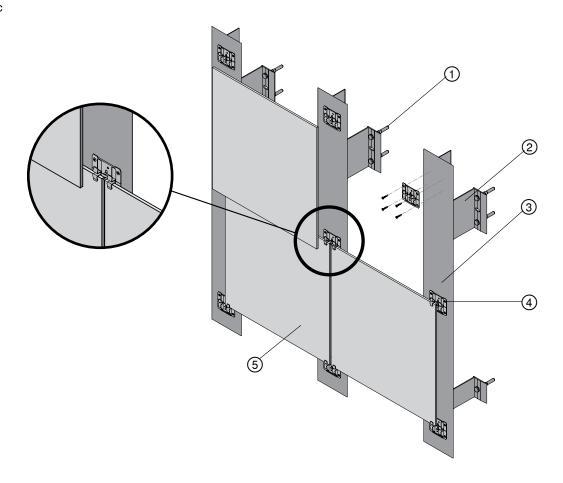






### **CERAMIC - VISIBLE CLAMPS**

Ceramic



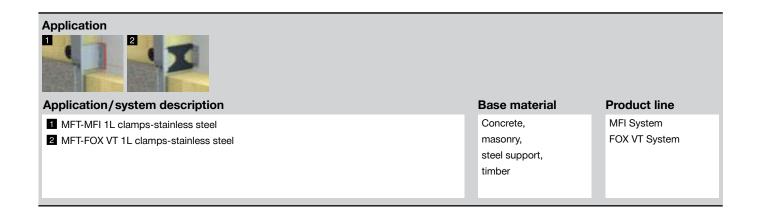


MFI-bracket



FOX VT-bracket

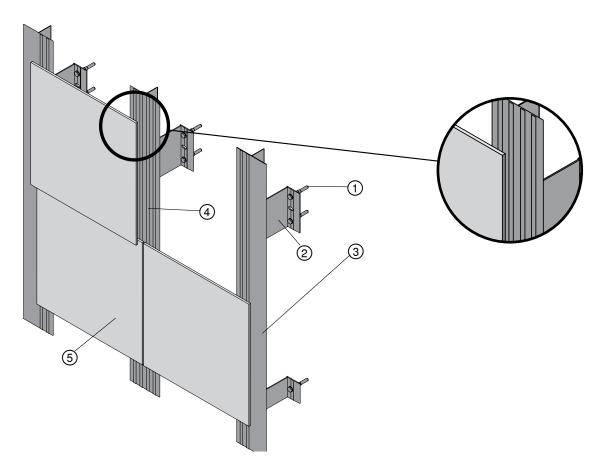
Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Clamp	Hilti	
(5)	Ceramic panel	Others	



# CERAMIC - CONCEALED ADHESIVE BONDING



Ceramic



Bill of materials		
Reference	Description	Supplier
1	Bracket fastening	Hilti
2	Bracket	Hilti
3	Profile	Hilti
4	Adhesive bonding material	Others
(5)	Ceramic panel	Others



MFI-bracket



EOX H-bracke



FOX VT-bracket



FOX HT-bracket



S2S-bracket

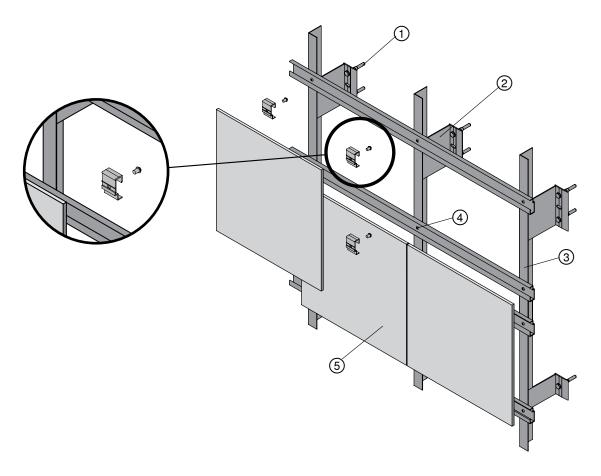






#### Ceramic

# CERAMIC - CONCEALED UNDERCUT ANCHORS





MFI-bracket



FOX VT-bracket



S2S-bracket

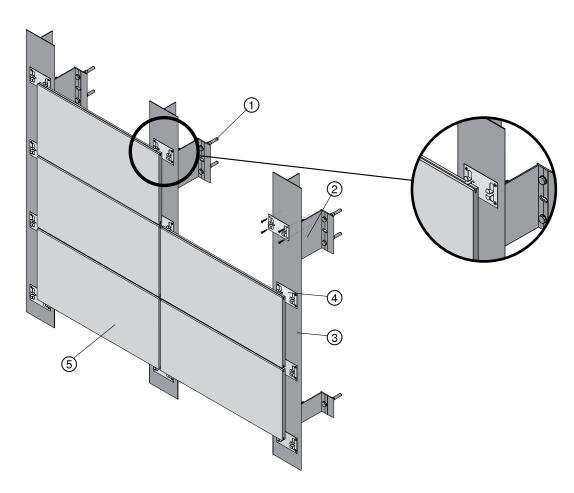
Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Hanger and undercut anchor	Hilti	
(5)	Ceramic panel	Others	



## **CERAMIC - CONCEALED CLAMPS**

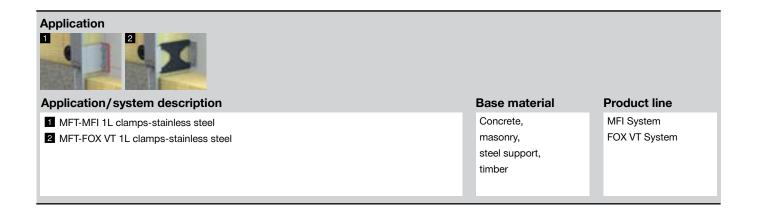


Ceramic



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Stainless steel clamp	Hilti	
(5)	Ceramic panel	Others	







## **TERRACOTTA**

**Terracotta** is a clay-based unglazed or glazed ceramic cladding material.

















Fiber-cement

HPI

Metal

al Reno

Render

Ceramic

Terracotta

Stone

Composite





# TERRACOTTA - PANEL FASTENING

#### Concealed

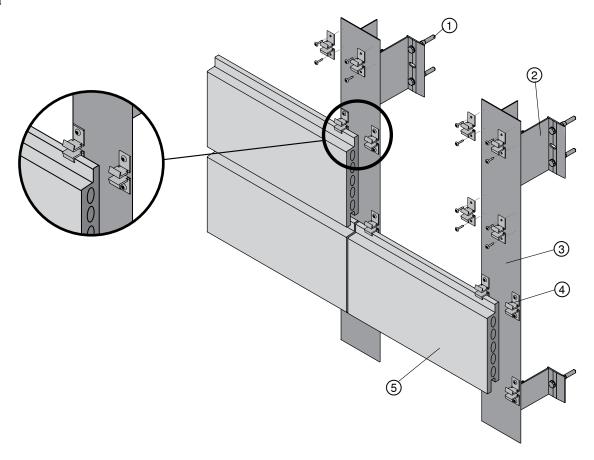






#### Terracotta

# TERRACOTTA - CONCEALED CLAMPS



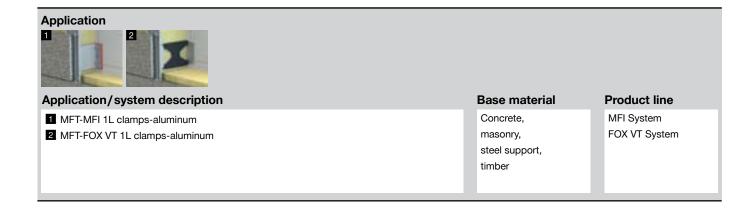


MFI-bracket



FOX VT-bracket

Bill of materials			—
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Aluminum clamp	Hilti	
5	Ceramic panel	Others	



Ventilated Facades – 3 Panels and Systems



#### **STONE**

**Stone** panels are made from natural stone.

















Fiber-cement

Metal

Render

Ceramic

Terracotta

Stone

Composite





#### Concealed







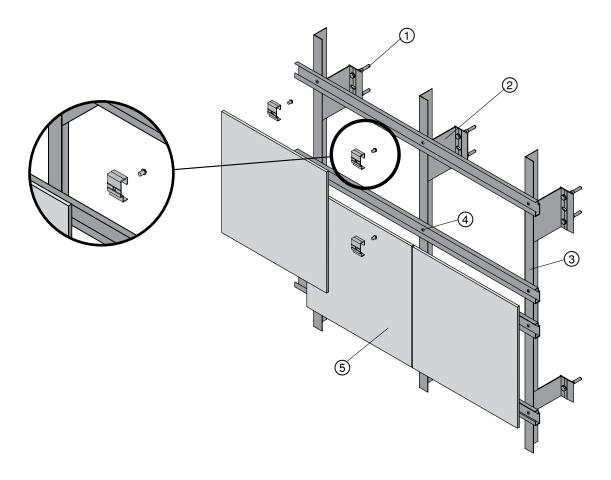






#### Stone

# STONE - CONCEALED UNDERCUT ANCHORS





MFI-bracket

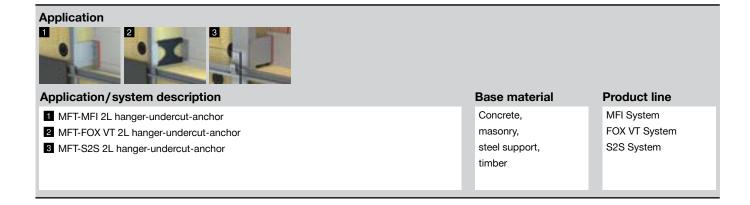


FOX VT-bracket



S2S-bracket

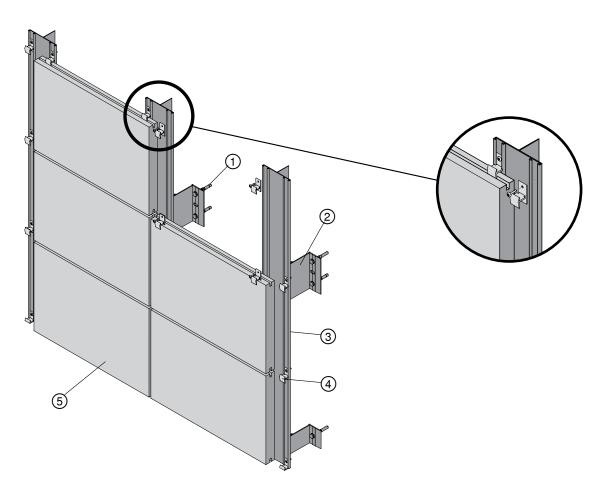
Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Hanger and undercut anchor	Hilti	
(5)	Stone panel	Others	



#### STONE - CONCEALED CLAMPS



Stone



Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Clamps	Hilti	
(5)	Stone panel	Others	



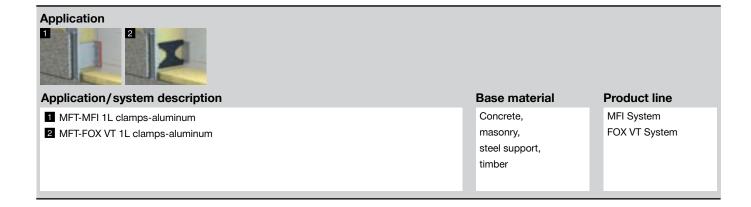
MFI-bracket



FOX VT-bracket



S2S-bracket





#### **COMPOSITE**

Composite cladding materials consist of two aluminum layers and a mineral or plastic core.



















Metal

Render

Ceramic

Terracotta

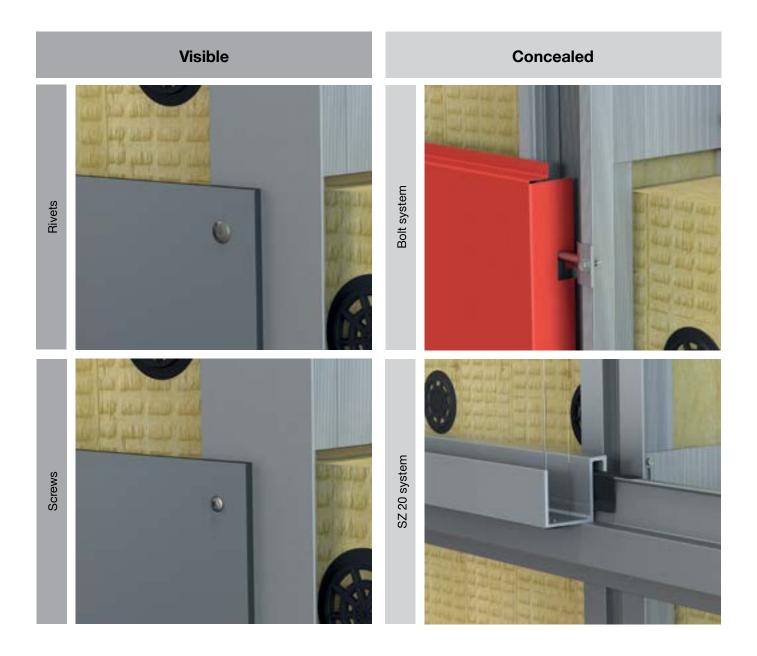
Stone

Composite





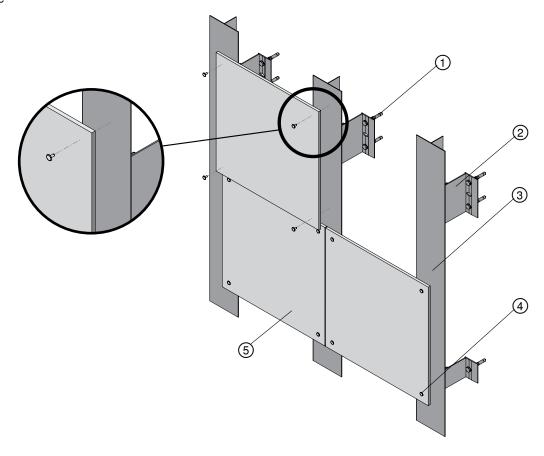
# **COMPOSITE - PANEL FASTENING**







# **COMPOSITE - VISIBLE RIVETS**





MFI-bracket



FOX VT-bracket



FOX H-bracket



FOX HT-bracket

;

Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Rivet	Others	
(5)	Composite sheet	Others	



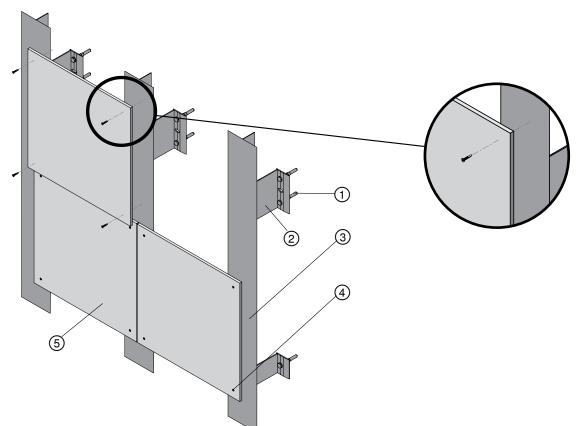
S2S-bracket

Application 2 3 3	4 5 5	6 7	8
Application/system description		Base material	Product line
1 MFT-MFI 1L adhesive-rivets-screws	5 MFT-FOX H 2L adhesive-rivets-screws	Concrete,	MFI System
2 MFT-FOX VT 1L adhesive-rivets-screws	6 MFT-FOX HT 1L rivets-screws	masonry,	FOX VT System
3 MFT-S2S 1L adhesive-rivets-screws	7 MFT-FOX HT 2L adhesive-rivets-screws	steel support,	S2S System
4 MFT-FOX H 1L rivets-screws	8 MFT-MFI 2L stulp	timber	FOX H System

FOX HT System

#### **COMPOSITE - VISIBLE SCREWS**





Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Screw	Others	
(5)	Composite sheet	Others	



MFI-bracket



EOX H-bracke

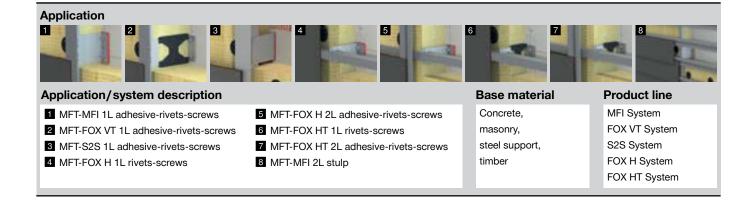


FOX VT-bracket



FOX HT-bracket

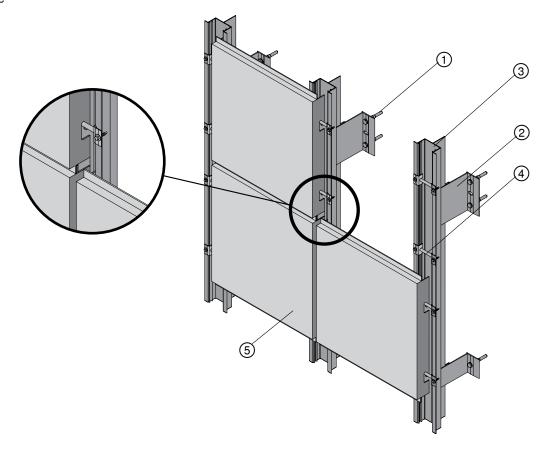








# **COMPOSITE - CONCEALED BOLT SYSTEM**





MFI-bracket

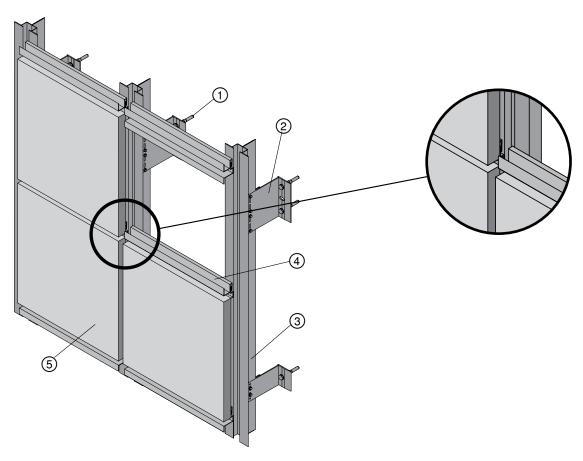


Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	Bolt system	Hilti	
5	Composite sheet	Others	

Application 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
Application/system description	Base material	Product line
MFT-MFI 1L bolts	Concrete,	MFI System
2 MFT-FOX VT 1L bolts	masonry,	FOX VT System
	steel support,	
	timber	

# **COMPOSITE - CONCEALED SZ20 SYSTEM**





Bill of materials			
Reference	Description	Supplier	
1	Bracket fastening	Hilti	
2	Bracket	Hilti	
3	Profile	Hilti	
4	SZ20 system	Hilti	
(5)	Composite sheet	Others	



