



Freedom of design:

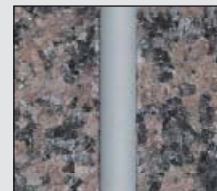
fischer System A | C | T

for fixing ventilated cladding

fischer ACT System – the key to new façade aesthetics.

With its ACT System (Advanced Curtain wall Technique), fischer offers architects and specifiers an innovative, high-quality, all-inclusive system for fixing ventilated claddings. Apart from technical and financial advantages, the ACT System also provides a particularly extensive scope for architectural design. For example, ACT allows the use of façade natural stone panels from 20 mm in thickness and glass panes ESG and TVG from 6 mm glass thickness, free positioning of the anchor anywhere on the rear side of the panel and easy replacement of all or individual panels. Even reveal panels can be attached with ease and in many different ways. ACT's aesthetic highlight is its undercut technology combined with the FZP fischer zykon panel, which ensures that there are no visible fixing elements at the joint.

Complete service from a single source. The ACT System is not restricted to innovative fixing products – this is only the start. Fixing specialists at the ACT Competence Centres offer architects, specifiers and craftsmen comprehensive support, from the planning stage and static calculations through to on-time delivery to the site. Their service also includes provision of design software and instruction for users, as well as advice in selecting the appropriate fischer drilling machines.



*Appearance of ACT joint
without unattractive
fixing points*



*Appearance of joint
with conventional dowel
fixing*

*Concorde Hotel,
Berlin, façade material:
Kirchheimer Muschelkalk,
keyhole-type bracket,
reveal angles, FZP*





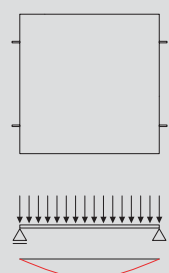
Where powerful forces are at work.



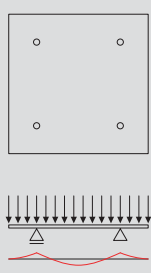
The fischer ACT System opens up the way for effortless and cost-efficient design of attractive, complex façades. The reason lies in the system itself - FZP, the fischer zykon panel anchor, which is undercut and therefore stress-free fixing system that is installed into pre-drilled undercut hole. This technology offers several times higher ultimate loads than conventional fixings. Because anchor positioning can be optimised, the bending moment within the panel is reduced by about 50% when compared to traditional systems. This allows reduced panel thickness and larger panel sizes. In addition, the varied panel thickness can be compensated by the use of stand-off anchor types.

ACT extends the options – and reduces the costs. ACT System technology perfectly combines the use of panel anchors, individual substructures and sophisticated drilling technology. This pays off on the construction site, where installation is fast and simple, non-dependent on weather conditions. Construction time is reduced – and so are costs..

Traditional fixing



FZP undercut fixing



Optimisation of the bending moment of the façade panel.

Picture left: NCC administration building, Copenhagen. Façade material: Otta slate, SystemOne light on steel skeleton-frame structure, FZP.

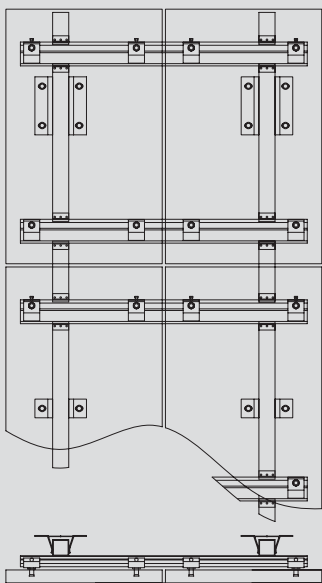


Compensating for panel thickness tolerances.



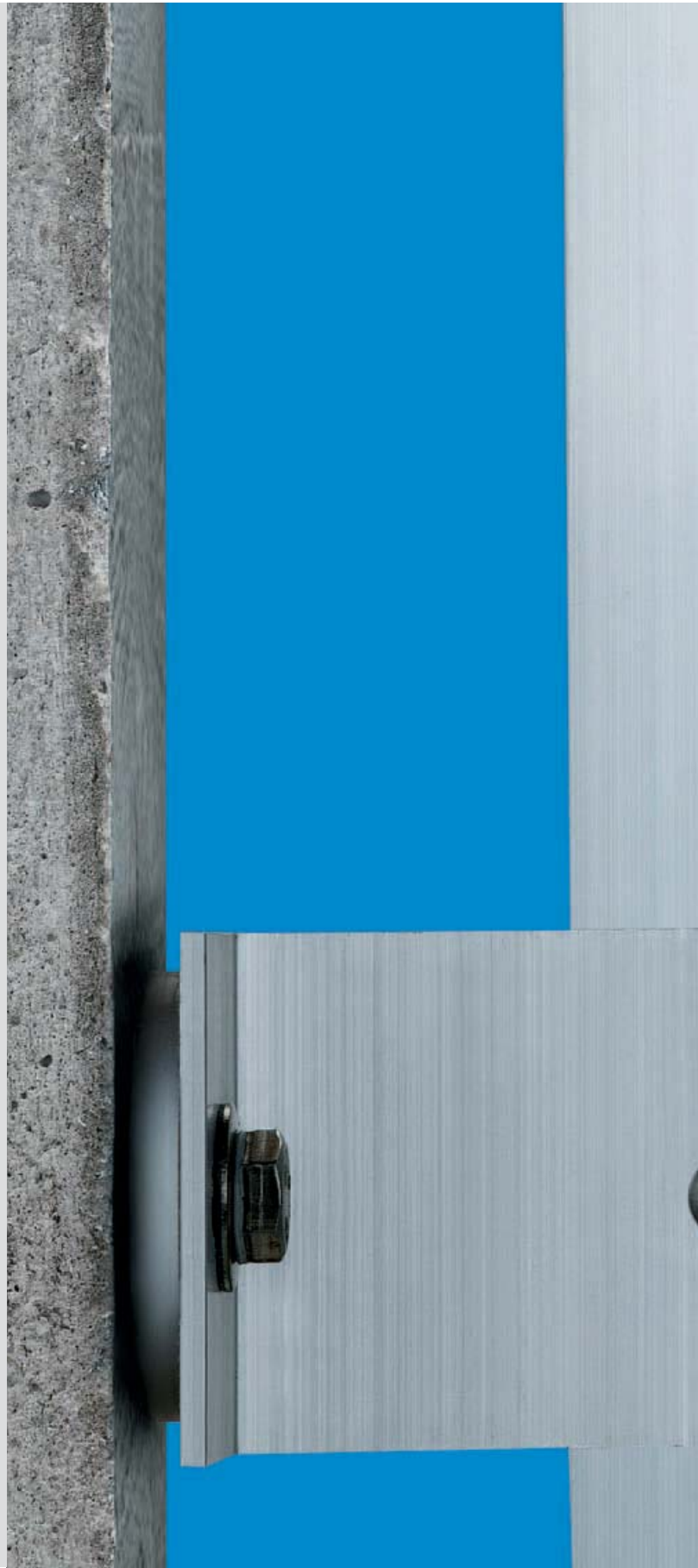
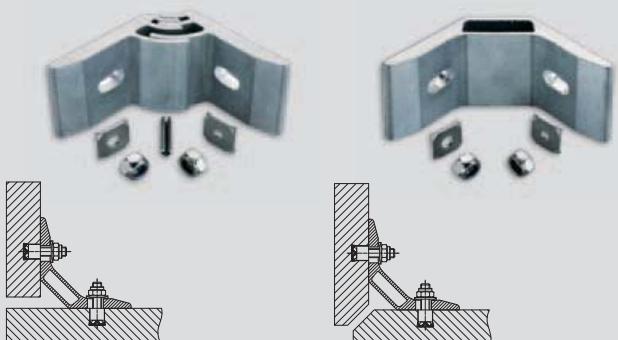
There are a lot of good ideas behind FZP, such as SystemOne.

SystemOne, fischer's framework substructure, is an integral part of ACT system technology. It is designed for high loads, for large-size, heavy, natural stone panels, and for bridging non-bearing structural elements. SystemOne reduces on-site installation times and noise, for example during renovation works, and makes replacing panels easier.



*SystemOne
substructure..*

Cost-effective and standard-compliant: fischer reveal angle bracket for mechanical fixing of reveal panels on the SystemOne substructure.





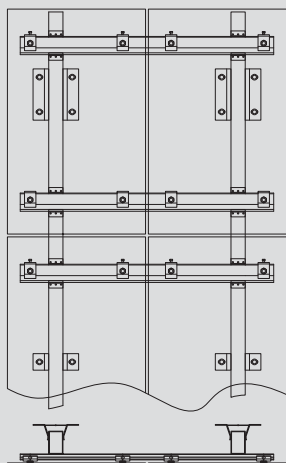
Especially for lightweight façade panels – SystemOne light.

SystemOne light is an efficient solution when it comes to installing ventilated claddings made of lightweight façade panels. As you would expect, this rail-based system also offers all the advantages that make SystemOne unique:

- fast installation thanks to hook and hang system
- no anchoring point visible within joint
- designed for high loads
- bridging of non-bearing structural elements
- perfect for over-cladding of steel-frame constructions
- mechanical fixing for reveal panels
- non-destructive replacement of façade panels

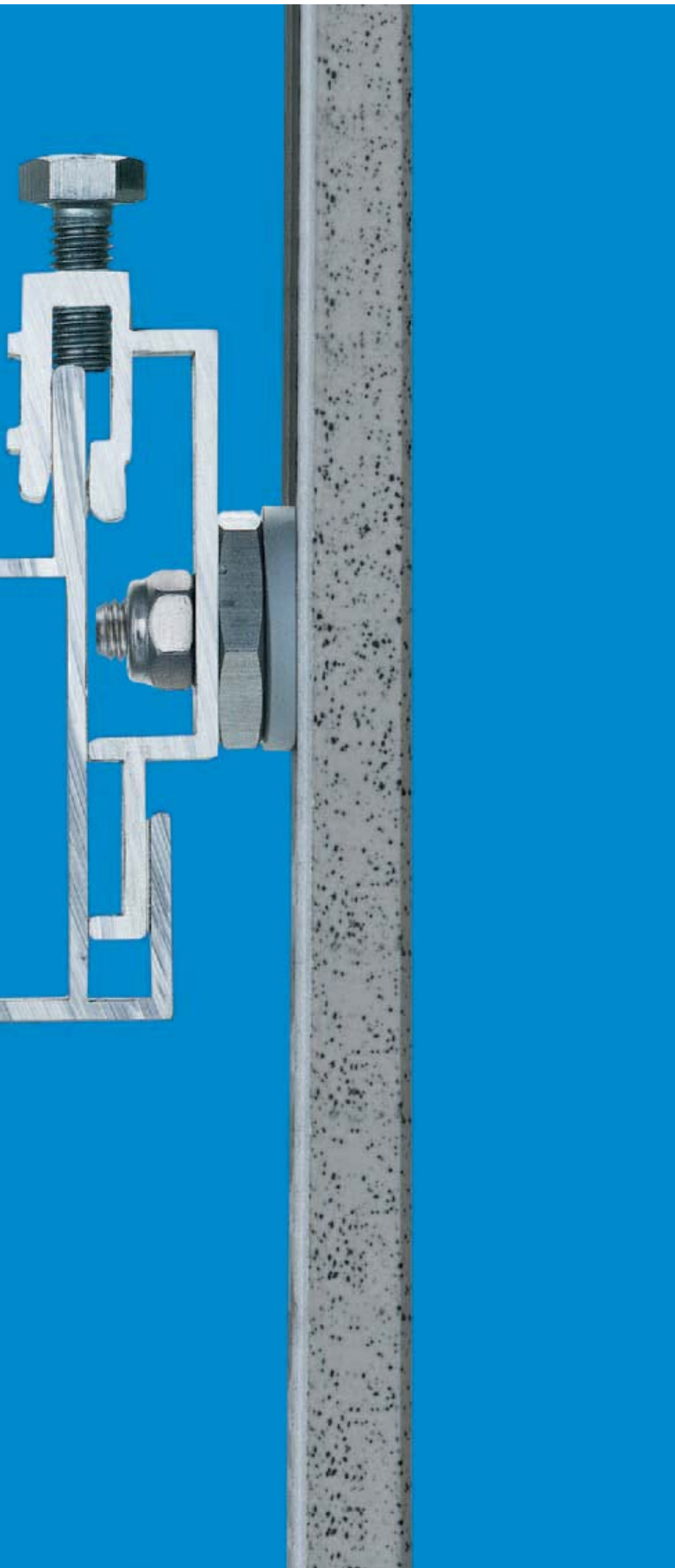
Wall bracket system:

- minimised cold bridges
- reduced drilling costs
- noise reduction during renovation works
- dry installation, even at extreme temperatures



SystemOne light substructure.



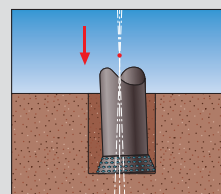


Drilling and setting technology in fischer quality.

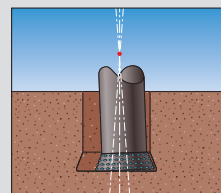
ACT drilling technique, same as our undercut anchor and substructure, is state of the art technology. The appliances for drilling undercut holes are essential parts of the overall system, which consists of drilled hole and anchor. For drilling, fischer offers in-house developed machines in various sizes ranging from portable machines for on-site use through to large-scale, serial production facilities. These machines allow fast and cost-effective drilling of holes thanks to diamondtipped drilling tools. Setting appliances are then used to fit the anchors into the panels. Fitting specialists at the ACT Competence Centre offer a comprehensive range of services in connection with drilling and setting:

- large variety of machines
- large-scale machines for serial production
- support in the selection of the machine
- purchase/renting of machinery

Drilling the undercutting holes.

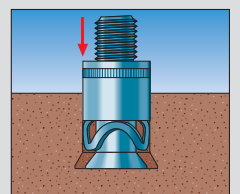


Cylindrical drilling

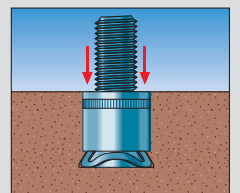


Undercutting

Setting the FZP anchor.



Setting the anchor



Installed anchor

Innovation in Glass: Undercut Point Fixing in Glass.



The first glass point fixing with undercut in the world is state of the art

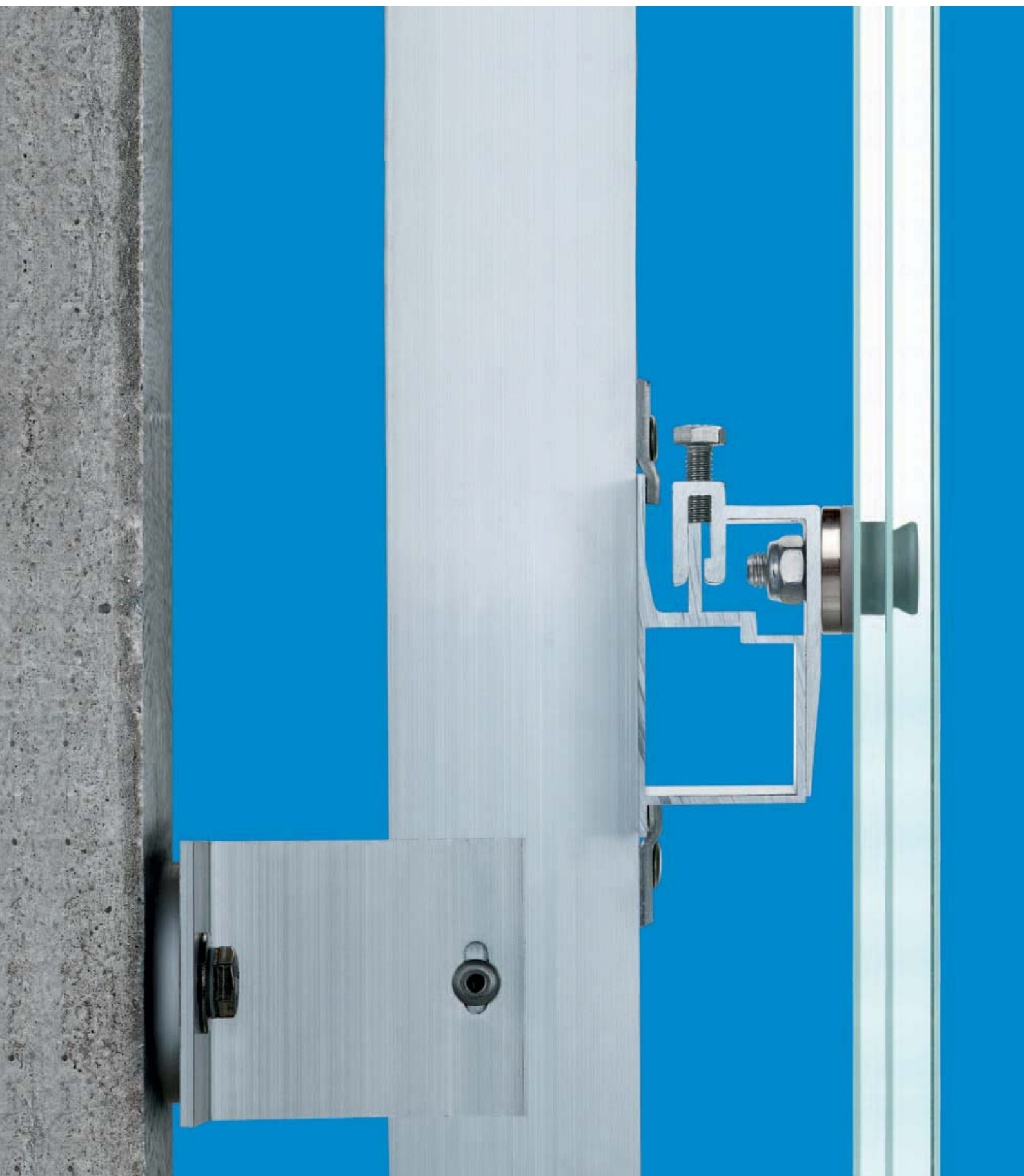
The Deutsche Institut für Bautechnik [German Institute for Building Technology] (DIBt) in Berlin has issued a general approval for the fischer Zykon point fitting (FZP-G). The revolutionary development is state of the art and can now be used without consent in individual cases for sophisticated glass façades. By using undercut technology, our company has succeeded in creating the first point fitting for glass in the world in which the hole does not penetrate the glass.

The FZP-G-Z involves an undercut point fitting made from stainless steel. It consists of cone bolt, expansion sleeve, plastic cap, shim washer and retaining nut.

The smooth outside of the glass façade offers the architect a broader design field, while at the same time, the susceptibility to soiling and cleaning requirements are reduced. The fischer FZP-G-Z is offered in two variations for glazing with toughened safety glass (ESG or ESG-H) and laminated safety glass (VSG). The glass panes can be enamelled or coated and can also serve as substrates for solar elements that are laminated on.



**We create new ways to design
modern façades.**





Assembly chamber, Bavarian Parliament, Munich, wall and overhead glazing fixed with FZP-G.



Apartment building, Dresden, glass façade fixed with FZP-G.



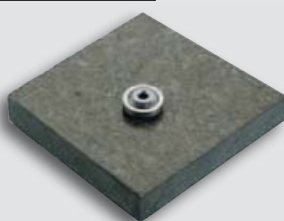
Neuer Wall 52, Hamburg. Glass shingle façade, fixed with FZP-G on SystemOne light.

The new freedom in façade design.

With ACT, you also benefit from a great choice of materials:

HPL/Fibre cement

from 8/12 mm panel thickness*

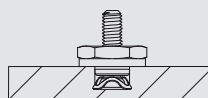
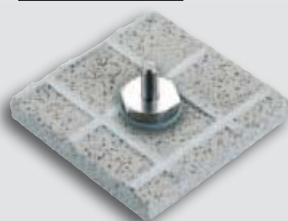


FZP-N

*depends on material

Ceramic/Fine stoneware

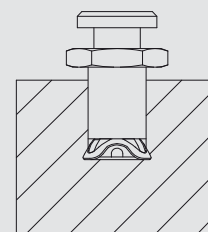
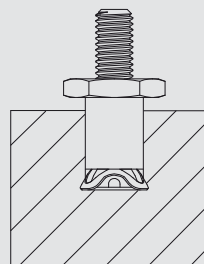
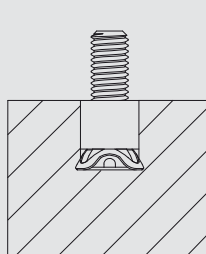
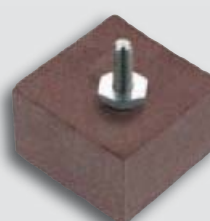
from 10 mm panel thickness*



FZP-K

Natural stone/Cast stone

from 20 mm panel thickness*



FZP



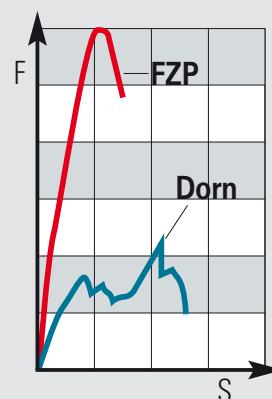
FZP-6kt



FZP-ES

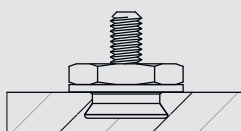
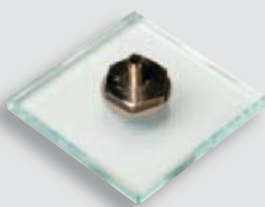
Average ultimate load values:

Material	Panel thickness [mm]	Embedment depth h_v [mm]	Connection thread	Average ultimate load value	
				FZP [kN]	Dorn [kN]
Tropical Sun	30	15	M8	6,0	1,8
Rosa Sardo Beta	30	15	M8	7,5	2,2
Impala Black	30	15	M8	13,0	2,6
Jura lime stone	30	15	M8	6,5	2,5
Obernkirch sandstone	40	20	M8	5,5	1,9
Udelfanger sandstone	40	20	M8	4,0	1,7



Toughened safety glass

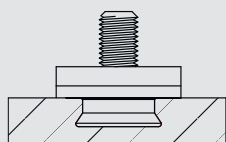
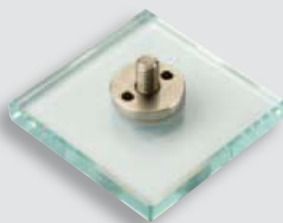
8 mm glass thickness



FZP-G

Toughened safety glass

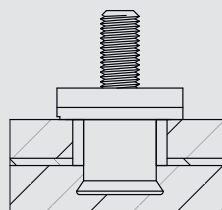
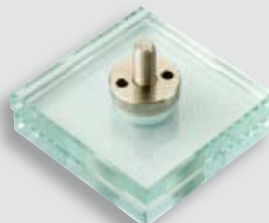
from 10 mm glass thickness



FZP-G-Z

Laminated safety glass

from 10/8 mm glass thickness



FZP-G-Z

ACT Service

ACT Service offers:

Application technology advice

- determination of ultimate loads and anchor selection
- advice and support for frame-work systems
- support for licensing procedures (license for individual cases or building-inspectorate approval)
- support for architects, designers, structural engineers, consultants etc. during all stages of your build ing project
- on site support
- international subsidiaries guarantee technical support outside Germany

Machinery services

- technical advice on selection of machines
- hire or purchase of machines
- if required machine is made to customer specifications
- demonstration/instruction by our expertly trained personnel
- machinery service provided by fischer service engineers

GERMANY

fischerwerke GmbH & Co. KG

Werk Altheim
Hindenburgstr. 81
72160 Horb
Germany
Phone +49 (0)74 43 12-45 53
Fax +49 (0)74 43 12-49 07
act@fischer.de · www.fischer.de

Argentina

fischer Argentina S.A.
Armenia 3044
1605 Munro Ra-PCIA: De Buenos Aires
Phone +54 1147 62 27 78
Fax +54 1147 56 13 11
asistenciaticnica@fischer.com.ar
www.fischer.com.ar

Australia

fischer Australia Pty. Ltd.
61 Waterview Close
Dandenong VIC 3175
Phone +61 (0) 3 97992096
Fax +61 (0) 3 97992696
info@fischerfixings.com.au
www.fischerfixings.com.au

Austria

fischer austria Gesellschaft m.b.H.
Wiener Straße 95
2514 Möllersdorf/Traiskirchen
Phone +43 2252 5 37 30
Fax +43 2252 5 31 45
office@fischer.at
www.fischer.at

Belgium

fischer Cobemabel snc
Schaliënhoedreef 20 D
2800 Mechelen
Phone +32 152 8 47 00
Fax +32 152 8 47 10
info@fischerbelgium.be
www.fischer.be

Brazil

fischer brasil Industria e Comercio Ltda.
Rua do Rócio 84 10º andar Vila Olímpia CEP
04552-000 São Paulo - SP
Phone +55 11 30 48 86 06
Fax +55 11 30 48 86 07
fischer@fischerbrasil.com.br
www.fischerbrasil.com.br

China

fischer (Taicang) fixings Co. Ltd.
Shanghai Rep. Office Rm 1503-1504,
Design & Idea Workshop, No. 63
Chifeng Road
200092 Shanghai
Phone +86 21 51 00 16 68
Fax +86 21 65 97 96 69
fichnsh@fischer.com.cn
www.fischer.com.cn

Czech Republic

fischer international s.r.o.
Průmyslová 1833
25001 Brandýs nad Labem
Phone +42 03 26 90 46 01
Fax +42 03 26 90 46 00
info@fischerwerke.cz
www.fischer-cz.cz

Denmark

fischer a/s
Sandvadsvej 17 A
4600 Køge
Phone +45 46 32 02 20
Fax +45 46 32 50 52
fidk@fischerdanmark.dk
www.fischerdanmark.dk

France

fischer S. A. S.
12, rue Livio, P. O. Box 182
67022 Strasbourg-Cedex
Phone +33 388 39 18 67
Fax +33 388 39 80 44
info@fischer.fr
www.fischer.fr

Great Britain

fischer fixings UK Ltd.
Whitely Road
Oxon OX10 9AT Wallingford
Phone +44 1491 82 79 00
Fax +44 1491 82 79 53
info@fischer.co.uk
www.fischer.co.uk

Greece

fischer Hellas
Emporiki EPEG. Papandreou 125
144 52 Metamorphosis Athens
Phone +30 210 2838167
Fax +30 210 2838169

Hungary

fischer Hungária Bt.
Gubacsi út 28.
1092 Budapest
Phone +36 1 347 97 55
Fax +36 1 347 97 66
info@fischerhungary.hu
www.fischerhungary.hu

Italy

fischer italia S.R.L.
Corso Stati Uniti, 25, Casella Postale 391
35127 Padova Z.I. Sud
Phone +39 049 8 06 31 11
Fax +39 049 8 06 34 01
sercli@fischeritalia.it
www.fischeritalia.it

Japan

fischer Japan K.K.
Seishin Kudan Building 3rd Floor 3-4-15 Kudan Minami Chiyoda-ku
102-0074 Tokyo
Phone +81 50 3675 7782
Fax +81 50 3675 7782
georg.lenz@fischerjapan.co.jp
www.fischerjapan.co.jp

Korea

fischer Korea Co., Ltd
#503 Dae-Ryung Techno Town 8th
481-11 Gasan-dong, Geumcheon-Gu,
153-775 Seoul
Phone +82 1544 8955
Fax +82 1544 8903
info@fiskerkorea.com
www.fiskerkorea.com

Mexico

fischer Sistemas de Fijación, S.A.
de C.V.
Gustavo Baz No. 47 Col. Xocoyoualco
Tlalnepantla
54080 Estado de Mexico
Phone +52 55 55 72 08 83
Fax +52 55 55 72 15 90
info@fiskermex.com.mx

Netherlands

fischer Benelux B.V.
Amsterdamsestraatweg 45 B/C
1411 AX Naarden
Phone +31 35 6 95 66 66
Fax +31 35 6 95 66 99
info@fischer.nl
www.fischer.nl

Norway

fischer Norge AS
Enebakkveien 117
0680 Oslo
Fax +47 23 24 27 10
www.fiskernorge.no

Poland

fischerpolska Sp.z o.o
ul. Albatrosow 2
30-716 Kraków
Phone +48 12 2 90 08 80
Fax +48 12 2 90 08 88
info@fischerpolska.pl
www.fischerpolska.pl

Portugal

Fischerwerke Portugal, Lda
Apartado 8327 EC. Cabo Ruivo
1804-001 Lisboa
Phone +351 21 855 83 67
Fax +351 21 851 41 43

Russia

000 fischer Befestigungssysteme
Rus
I. Dokukina 16/1, Building 1
129226 Moscow
Phone +7 495 223-03-34
Fax +7 495 223-03-34
info@fischerfixing.ru
www.fischerfixing.ru

Singapore

fischer systems Asia Pte. Ltd.
150 Kampong Ampat #04-03 KA
Centre
368324 Singapore
Phone +65 62 85 22 07
Fax +65 62 85 83 10
sales@fischer.sg

Slovak Republic

fischer S.K. s.r.o.
Vajnorská 134/A
831 04 Bratislava
Phone +421 2 4920 6046
Fax +421 2 4920 6044
info@fischerwerke.sk
www.fischer-sk.sk

Spain

fischer iberica S.A.
Klaus Fischer 1
43300 Mont-Roig del Camp
Tarragona
Phone +34 977 83 87 11
Fax +34 977 83 87 70
tacos@fischer.es
www.fischer.es

Sweden

fischer Sverige AB
Koppargatan 11
602 23 Norrköping
Phone +46 11 31 44 50
Fax +46 11 31 19 50
www.fiskersverige.se

Taiwan

FU HAU Engineering Corp.
No. 7, Lane 84, Sec. 1 Da-An Rd
Taipei
TAIWAN
Phone +886 2 2773 5110
Fax +886 2 2773 5339
swapnal@ms61.hinet.net

United Arab Emirates

fischer FZE
P.O. Box 261738, Jebel Ali Free Zone
Dubai
Phone +97 14 8 83 74 77
Fax +97 14 8 83 74 76
fixings@fischer.ae

United States of America

Probe Construction Products Inc.
96 Chopin Drive
Wayne, NJ 07470
UNITED STATES OF AMERICA
Phone +1 973 8311761
Fax +1 973 8310146
m.tett@att.net