A guide to supporting sprinkler systems

APPLICATIONS

- Industrial companies
- High-bay warehouses
- Office buildings
- Logistics areas
- Public buildings and institutions
- Sales entities
- High-rises
- Underground garages
- Museums
- Congress and conference centres

APPROVALS

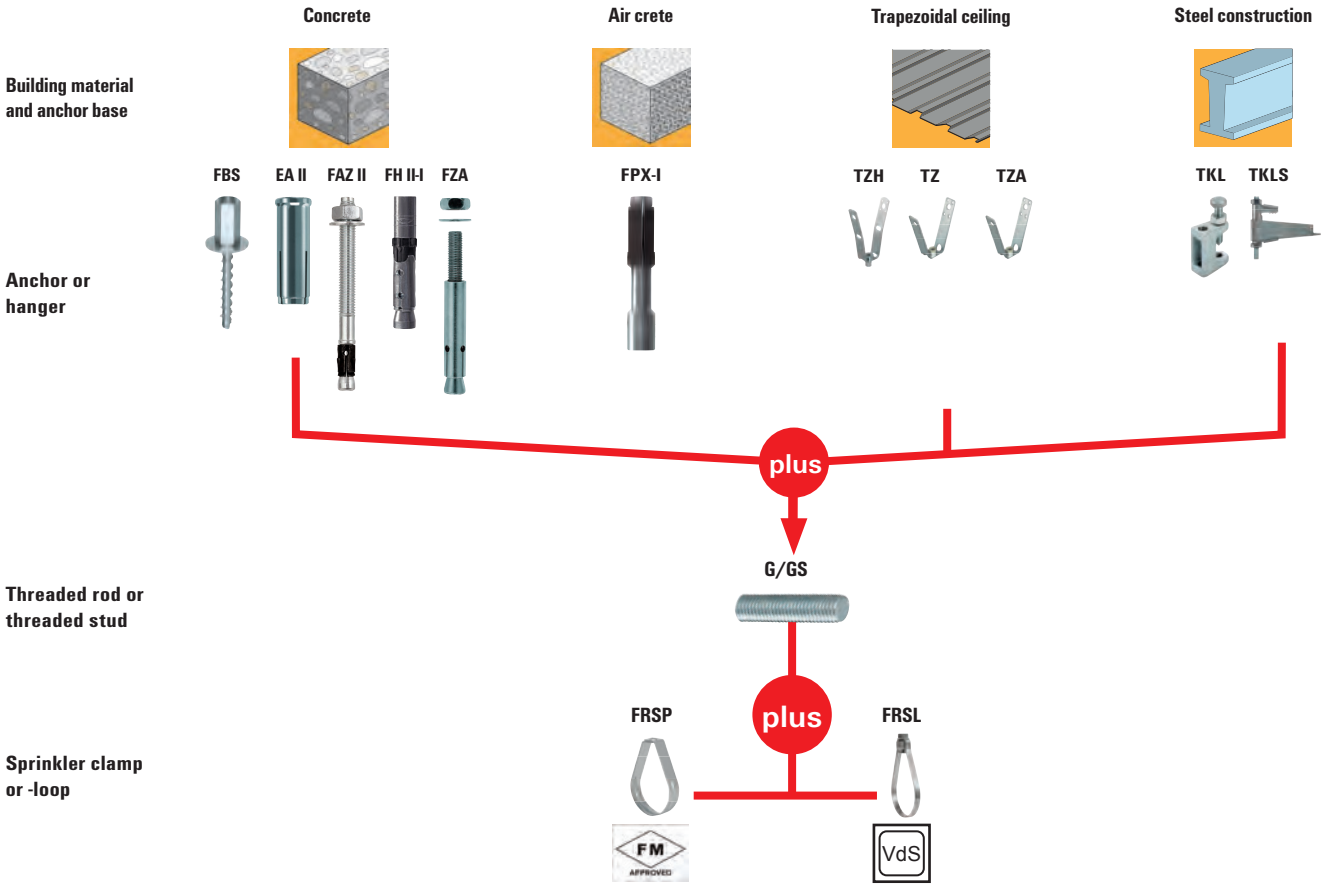
Sign of conformity VdS CEA 4001 in concrete ceilings:

DESCRIPTION

Sprinkler systems fall into the category of Active Fire Protection and could be considered as detection and suppression systems, which usually covers the complete floor plan. This means that sprinklers are usually installed in all rooms of a building and are designed in accordance with the actual fire hazard, the temperature - dependent opening of the sprinkler normally activates an acoustic sound and sends a signal to the fire control system. Over the past decade sprinkler systems extinguishing rates have been high and as a result are standard in some types of buildings.

In general, sprinkler systems are designed in accordance with the following standards: VdS CEA 4001 Section 15.2.4 Anchorage in Concrete Ceilings, FM 1951 Section 3.2 Technical & Constructional Properties, UL 203 Section 11.3 Pipe Hangers for Fire Protection Systems, NFPA 13 Section 9.1.3 Fixings in Concrete and or to EN 12845 which is an identical standard to CEA 4001.

APPLICATION DATA



SPECIFICATIONS

Type	Art No.	[Zoll] / [mm]
FRSL 34	513302	1"
FRSL 43	513303	1 1/4"
FRSL 49	513304	1 1/2"
FRSL 60	513307	2"
FRSL 76	513308	2 1/2"
FRSL 90	513309	3"
FRSL 115	513310	4"
FRSL 140	513311	5"
FRSL 170	513312	6"

Type	Art No.	[Zoll] / [mm]
FRSP 1/2"	524035	1/2"
FRSP 3/4"	524036	3/4"
FRSP 1"	524037	1"
FRSP 1 1/4"	524038	1 1/4"
FRSP 1 1/2"	524039	1 1/2"
FRSP 2"	524040	2"
FRSP 2 1/2"	524041	2 1/2"
FRSP 3"	524042	3"
FRSP 4"	524043	4"
FRSP 5"	524044	5"
FRSP 6"	524045	6"
FRSP 8"	524046	8"

Type	Art No.	[Zoll] / [mm]
ETR 8 - 13	024415	M 6
ETR 12 - 17	024416	M 6
ETR 15 - 21	024417	M 6
ETR 20 - 27	024418	M 8
ETR 26 - 34	024419	M 8
ETR 33 - 42	024420	M 8
ETR 40 - 49	024421	M 8
ETR 50 - 60	024422	M 8
ETR 60 - 70	024423	M 10
ETR 66 - 76	024424	M 10
ETR 70 - 82	024425	M 10
ETR 80 - 90	024426	M 10
ETR 90 - 102	024427	M 12
ETR 100 - 108	024428	M 12
ETR 102 - 114	024429	M 12
ETR 121 - 127	024430	M 12
ETR 126 - 133	024431	M 12
ETR 131 - 140	024432	M 14
ETR 143 - 153	024433	M 14
ETR 150 - 159	024434	M 14
ETR 168	024435	M 14
ETR 193,7	024436	M 14
ETR 219	024437	M 14

Type	Art No.	[Zoll] / [mm]
G 8	079740	1000
G 10	079744	1000
G 12	020957	1000
G 16	020958	1000
G 8/2	079741	2000
G 10/2	079745	2000
G 12/2	579746	2000
G 10/3	557092	3000
G 12/3	064056	3000

Type	Art No.	[Zoll] / [mm]
GS 8/25	079750	25
GS 8/40	079751	40
GS 8/50	079752	50
GS 8/60	079753	60
GS 8/70	079754	70
GS 8/80	079755	80
GS 8/90	079756	90
GS 8/100	079757	100
GS 8/150	079758	150
GS 8/200	079759	200
GS 10/25	079765	25
GS 10/40	079766	40
GS 10/60	079767	60
GS 10/80	079768	80
GS 10/100	079769	100
GS 10/120	079770	120
GS 10/150	079771	150
GS 10/200	079772	200

Type	Art No.	[Zoll] / [mm]
TKL L M 8	064055	M 8
TKL M 8	079687	M 8
TKL L Ø 9	077605	Ø 9
TKL M 10	079688	M 10
TKL Ø 11	079689	Ø 11
TKL M 12	020949	M 12
TKL Ø 13	043275	Ø 13
SS-TKL M10/M12	048154	M10/M12

Type	Art No.	[Zoll] / [mm]
TKLS Ø 9	531134	Ø 9
TKLS Ø 11	531136	Ø 11
TKLS Ø 13	531137	Ø 13
TKLS Ø 17	531138	Ø 17

Type	Art No.	[Zoll] / [mm]
TZ M 8	064094	M 8
TZ M 10	064095	M 10
TZH M 8	079825	M 8
TZH M 10	079826	M 10
TZA M 10	524047	M 10

Please refer to our comprehensive main catalogue or our online web catalogue updated daily at www.fischer.de for information on further additions to our product range and our entire range.

ANCHOR APPROVAL OVERVIEW

Type	ETA concrete single	ETA concrete multiple	ETA air crete	VdS-compliant	VdS-approved	FM-approved
FAZ II	Option 1			✓		✓
FBS	Option 1	✓ (FBS 6)		✓		
FH II	Option 1			✓		✓
FZA	Option 1			✓		✓
FZEA II	Option 1			✓		✓
EA II	Option 7	✓		✓		✓
FNA II		✓		✓		
FPX-I			✓		✓	

Key:
ETA concrete, single, option 1 = suited for cracked and non-cracked concrete
ETA concrete, single, option 7 = suited for non-cracked concrete
ETA concrete, multiple = suited for cracked and non-cracked concrete