



Forget simple component tests - only system tested room constructions make your data centre secure! ¹

Criterion	Standard	Conventional construction ²	LSR 18.6 E	LER Basic	LER Extend
System test	 Test as a complete system or construction according to the following standards	X	✓	✓	✓
Fire protection Test at temperatures of up to over 1000° C	 ECB-S certification according to EN 1047-2, 50K temperature rise and 85% rel. humidity over 24 hours (soak-out period), heating time 60 minutes	X	✓	X	X
	50K temperature rise and 85% rel. humidity over 30 minutes, without soak-out period	X	✓	X	✓
	F120 as system test according to EN 1363 (DIN 4102), for the design of the room units and their installation modules.	X	✓	X	X
	F90 as system test according to EN 1363 (DIN 4102), for the design of the room units and their installation modules.	X	✓	✓	✓
	F180 as component test only according to EN 1363 (DIN 4102), wall system only	X	✓	X	X
	F120 as component test only according to EN 1363 (DIN 4102), wall system only	(✓)	✓	✓	✓
	F90 as component test only according to EN 1363 (DIN 4102), wall system only	✓	✓	✓	✓
Explosion	Detonation test as system test of 200 kg TNT from 40 m distance	X	✓	X	X
Water	Standing water, 72 hours, 40 cm, 20 droplets maximum	X	✓	X	X
	Fire-fighting water, IP x6 as system test according to EN 605 29, for the design of the room units and their installation modules.	X	✓	✓	✓
	relative humidity, 85 %, over 24 hours (soak-out period), 60 minute heating time, in accordance with EN 1047-2	X	✓	X	X
	relative humidity, 85 %, over 30 minutes	X	✓	X	✓
Dust tightness	IP 5x as system test according to EN 605 29, for the design of the room units and their installation modules	X	✓ +	✓	✓
Corrosive fire gases	Fume/smoke (corrosive gas) tightness based on EN 1634-3 (DIN 18095)	X	✓	X	✓
Unauthorised access	WK 3 as system test in accordance with EN 1627 / 1630, for the design of the room units and their installation modules, e.g. doors	X	✓	✓	✓
	WK 2 as system test in accordance with EN 1627 / 1630, for the design of the room units and their installation modules, e.g. doors	X	✓	✓	✓
	WK 4 as component test only in accordance with EN 1627 / 1630, door system only	X	✓	X	X
Debris loads	Impact test as system test, 3 lateral impacts of 200 kg from 1.5 m height	X	✓	X	X
EMC protection	Verified in accordance with tests on comparable components by Aachen Technical University	X	✓	✓	✓

¹ System-tested products are tested as a complete design or construction. This includes both the room units and their installation modules such as doors, cable ducting or ventilation slides. Component tests on the other hand relate to individual parts only.

² The conventional construction method denotes room constructions made of RIGIPS (gypsum), concrete and other commonly used building materials, which are unable to provide sufficient security for data centre applications. In general, conventional construction methods are tested for use as a fire retardant wall.



What does "system tested" mean?

"System-tested products are tested as a complete design or construction. This includes both the room units and all their installation modules such as doors, cable duct systems or ventilation slides. Only this system test certifies the security for the room structure or design and compliance with important security standards for the IT security room as a whole.

The simple test of individual components is not very informative in business critical IT environments and is therefore ultimately not secure enough. Because the component test only tests the protection class of the individual component. However, it cannot be used to provide any information whatsoever about how the individual components together respond to threats, e.g. fire. These scenarios require a system test, in which it is precisely determined whether the overall construction of an IT security room or an IT security safe provides the required protection or not. Only the passed system test provides customers with adequate security - because it is "security at its best"!

What is tested?



Fire protection - fire test up to F180 ✓

according to DIN 4102-2 (EN1363) for design of the room units and their installation modules such as doors, cable ducting and ventilation units.



Burglary protection - up to WK4 ✓

according to EN 1627 / EN 1630 for the design of the room units and their installation modules



Dust protection - IP 5x ✓

according to EN 605 29 for the design of the room units and their installation modules.



Water / fire-fighting water protection - IPx6 ✓

according to EN 605 29 for the design of the room units and their installation modules.