S. No.	Requirement Set	Used for	Name
1	R1	IN1A	Interior vertical surfaces
2	R1	IN1B	Interior horizontal downward- facing surfaces
3	R1	INID	Interior surfaces within cavities
4	R1	IN1E	External surfaces of enclosures containing technical equipment
5	R1	IN4	Luggage storage areas
6	R1	IN5	Driver’s desk
7	R1	IN6A	Interior surfaces of gangways Type A - For railway vehicles in which there are no fire barriers at both bulk head ends of the gangway
8	R1	IN7	Window frames
9	R1	IN8	Curtains and sunblind in passenger area and staff area, staff compartments
10	R1	IN9B	Tables, folding tables downward facing surface b Type B - Downward-surfaces
11	R1	IN11	Litter bins and ashtrays
12	R1	IN12A	Air ducts - Interior surfaces
13	R1	IN12B	Air ducts - Exterior surfaces
14	R1	IN14	Devices for passenger information
15	R1	EX4A	Exterior air ducts connected to the interior of the vehicle - interior surface
16	R1	F5	Underside surface of couchettes and beds
17	R2	IN2	Limited surfaces
18	R2	IN9A	Tables, folding table tops, and toilet wash basins. Type A - Upper surfaces
19	R2	IN10	Containers

20	R3	IN3A	Strips
21	R4	IN3B	Light diffusers
22	R5	IN13	Air filters
23	R6	F1C	Seat shell - base in passenger areas
24	R6	F1D	Seat shell - back in passenger areas
25	R6	F1E	Removable head rests for seats in passenger areas
26	R7	IN6B	Interior surfaces of gangways Type B - For railway vehicles in which there are fire barriers at both bulk head ends of the gangway.
27	R7	IN12C	Air ducts on locomotives
28	R7	EX1A	Walls of external body shell
29	R7	EXIC	External surfaces of enclosures containing technical equipment
30	R7	EX3	Under frame of external body shell
31	R7	EX4B	Exterior ducts
32	R7	EX5	External design features
33	R7	EX6A	Containers mounted in under frame
34	R7	EX7	Exterior surfaces of gangways
35	R7	EX8	Bogie structure and parts
36	R7	EL3C	Arc splash barrier materials
37	R8	EX2	Roof of external body shell
38	R8	EX6B	Containers mounted on roof
39	R9	EX9	Air bags for pneumatic suspension
40	R9	EX10	Parts of the drive
41	R9	EX11	Elastomeric tyres (e.g. rubber)
42	R9	M1	Flexible metal/rubber units

43	R10	IN1C	Interior horizontal upwards-facing surfaces
44	R10	IN15	Floor composites
45	R11	EL3A	Arcresistant insulation materials Type A
46	R12	EL3B	Arc resistant insulation materials Type B
47	R13	EL8	Brake resistors
48	R14	EL4	Flammable insulation liquid
49	R15	EL1A	Cables for interior
50	R16	EL1B	Cables for exterior
51	R17	EX1B Subclause 5.3.1.2	Cab housing or vehicle leadingend moulding - External surfaces
52	R18	F1	Complete upholstered seats in passenger areas
53	R18	F1E	Removable head rests for seats in passenger areas
54	R19	F2	Seats in staff areas
55	R20	F4	Loose upholstery items for seats, couchettes and beds
56	R21	F1A	Upholstery and head rests for seats in passenger areas
57	R21	F1B	Armrests for seats in passenger areas
58	R21	F1E	Removable head rests for seats in passenger areas
59	R21	F1F	Seats in passenger areas without upholstery
60	R21	F3	Mattresses

61	R22	IN16	Interior seals
62	R22	EL2	Cable containment (linear product)
63	R22	EL6A	Supply line system and high power devices - Interior
64	R22	EL7A	Choke and coils - Interior
65	R22	M2	Hoses - Interior
66	R23	EX12	Exterior seals
67	R23	EL2	Cable containment (linear product)
68	R23	EL5	Supply line system devices - Exterior
69	R23	EL6B	Supply line system and high power devices - Exterior
70	R23	EL7B	Choke and coils - Exterior
71	R23	M3	Hoses - Exterior
72	R24	EL9	Printed circuit boards
73	R25	EL9	Printed circuit boards
74	R26	EL9	Printed circuit boards
75		EL10	Low power electro technical and electronic products
76	R27	EX13	Light diffuser and display screen cover
77	R28	Subclause 5.3.1.2	

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Details
Interior components (structure and covering) such as side walls, front/end walls, partitions, room dividers, flaps, boxes, hoods, louvres. Interior doors, interior lining of the front/end wall doors and external doors. Windows (including plastics and glazing) Insulation material and interior surface of body shell. Kitchen interior surfaces (except those of kitchen equipment).
such as ceiling panelling, flaps, boxes, hoods, louvres. Insulation material and interior surface of body shell.
The surfaces may be horizontal or vertical.
Enclosures which are located inside the body shell NOTE Fire resistance requirements may apply to enclosures containing technical equipment - see 4.2 and EN 45545-3.
Overhead luggage racks, vertical luggage racks, R1 luggage stacks, luggage containers and luggage compartments.
Panelling and surfaces of the driver's desk R1 (excluding electrical components/equipment).
Interior side of gangway membrane (bellows), interior lining of the gangway, (except flooring).
Window surround (including sealants and R1 gaskets).
Curtains and sunblind except where they are enclosed within a double glazed window.
Bottom surface of a table, the exposed vertical sides ofdrop down tables or any surface of a folding table that may become a bottom surface.
Inner and outer surfaces of litter bins and ashtrays.
Interior surfaces of ducts which are installed on the interior of the vehicle and from which air flows into the vehicle interior.
Exterior surfaces of ducts which are installed in the interior of the vehicle, but from which air flows into the vehicle interior.
Information display screens in passenger areas, not those in staff areas. Products such as speakers, handsets and their holders shall be considered as non-listed products
Interior surfaces of ducts which are installed on the exterior of the vehicle and from which air flows into the vehicle interior.
Compliance with 5.2.2.2 Fire integrity is also required.
they shall have an area < 0,2 m2; — they shall have a maximum dimension in any direction on the surface < 1 m; — they shall be separated from any other limited surface or strip by a distance of R1 compliant material greater than the dimension of the limited surface, measured in the same horizontal direction as the separation direction.
All tables and toilet wash basins (including surrounds).
Outer surface of water containers and air containers.

they shall have a width<200mm and be separated from another limited surface or strip by > 200 mm of R1 compliant material; — they shall not have length limitation. For example, vertical cover strips on walls.
For example, polycarbonate diffusers, Light coverings for lamps. Light units themselves and indicators are not within the scope of IN3B.
Materials for air filters used for equipment ventilation, heating and air conditioning.
The external surface of the base shell (including all coatings or coverings) shall be tested. Compliance with 52.2.2 Fire Integrity is also required.
The external surface of the back shell (including all coatings or coverings) shall be tested. Compliance with 5.2.2.2 Fire Integrity is also required.
Removable head rests shall be tested as if they were loose cushions.
Interior side of gangway membrane (bellows), interior lining of the gangway, (except flooring).
Exterior and interior surfaces of ducts, which are located in technical areas and from which no air flows to the passenger area and staff area of a vehicle.
Vertical parts of external structure of body shell and door leaves (including paint/coating systems, films and windows).
Enclosures which are located outside the body shell
External surfaces of under frame structure of the body shell (floor) including paint and coating systems (thermal, design and acoustic coating) and protective floor panelling.
Exterior and interior surfaces of ducts which are not in the scope of EX4A
External design features (e.g. streamlining parts, ventilation grills, flaps, skirts, coverings for HVAC systems, enclosures, etc.)
Outer surfaces of water containers and air containers which are positioned in the under frame.
Outer ~ membrane of intercommunication gangways.
The bogie structure shall include frames, spring leaf guides and bolster.
See 5.3.1in EN 45545-5:2013+A1:2015.
External roof structure of the car body (including paint/coating systems, films). Compliance with the requirements of R7 is also considered to be compliant for this requirement.
Outer surfaces of water containers and air containers which are positioned on the roof. Compliance with the requirements of R7 are also considered to be compliant to this requirement.
Wheel sets and brake discs.
Flexible metal/rubber units including elements in bogies

Interior components (structure and coverings) such as flaps, boxes, hoods, louvres. Insulation material and interior surface of body shell. Compliance with the requirements of R1 is also considered to be compliant for this requirement.
The floor composites include the floor substrate (together with any thermal insulation) and floor covering (together with any fixings or adhesives applied in end use conditions).
See 5.3.2 in EN 45545-5:2013+A1:2015.
See 5.3.3 in EN 45545-5:2013+A1:2015.
Casing and any heat shields
Cables not compliant with one of the standards referenced in 4.2c
Cables not compliant with one of the standards referenced in 4.2¢
Typically, the front of the train up to the cab partition (including paint/coating systems, films).
Complete passenger seat, including seat shell, upholstery, arm and head rests. Tip-up seats and staff seats (if accessible to passengers) are also included. Details of seat tests (including the conditions for vandalism testing) are given in EN 16989.
Removable head rests shall be tested as if they were loose cushions.
Staff seat upholstery and supporting structure (including the back/base shell) shall be tested according to the following conditions: — top surface of seat; — back shell from external surface; — external surface of base shell. Test in the end use conditions referring to guidance in Annex A. If the fire integrity condition of 5.22.2 is additionally met, then it is not necessary to test the shell/upholstery composite from the shell face. Whole seat is qualified if the requirement set is met. No further tests required.
Bed clothes for couchettes and beds (cushions, blankets, duvets, pillows, sleeping bags and sheets, etc.). Antimacassars shall be considered as non-listed products.
Upholstery includes the trimming (e.g. suspension system), flexible foam core, intermediate layers (e.g. fire barrier, anti-vandal layer), seat covers (e.g. base, back, side cover) and head rest upholstery. Details of test specimen preparation are given in Annex A.
The surface on which the arm rests shall be tested. In addition, the downwards facing and vertical surfaces in the normal operating position shall comply with the requirements of 5.2.2.2 Fire integrity. Details of test specimen preparation are given in Annex A.
Removable head rests shall be tested as if they were loose cushions.
All surfaces, outside the scope of F1C and F1D, R6 upholstery which support the seat user.
Details of test specimen preparation are given in Annex A.

Longitudinal seals such as window seals, door joints and panel connections.
Cable containment surface related (cable duct, cable conduit). See 5.3.6
Isolators; current and voltage transformers, main circuit breakers; contactors
Chokes for supply line filtering, coils for air cooled transformers, including spacers and air guiding plates
Pipes and hoses for fuel, oils, hydraulics, pneumatics, water and drainage
Longitudinal seals such as window seals, door joints and panel connections
Cable containment surface related (cable duct, cable conduit). See 5.3.6
Surge arresters; isolators; switches; main circuit breakers
Isolators; current and voltage transformers, circuit breakers; contactors
Chokes for supply line filtering, coils for air cooled transformers, including spacers and air guiding plates and traction motor winding insulation
Pipes and hoses for fuel, oils, hydraulics, pneumatics, water and drainage
Printed circuit boards with all varnishes applied but without any attached technical equipment
Printed circuit boards with all varnishes applied but without any attached technical equipment
Printed circuit boards with all varnishes applied but without any attached technical equipment
Examples include low power circuit breakers, overload relays, contactors, contactor relay, switches, control or signalling switches, terminals, fuses
Head light and tail lights, cover of display screen
Exposed surfaces of a material which form part of an assembly shall be tested to the appropriate requirement set defined in Table 2. Any material that is part of an assembly, but does not form part of all fire test specimens, for example because it exceeds the thickness limit of the test methods, may be separately tested to the relevant requirement(s) as defined in R17, except intermediate layers of floor assemblies which may be tested to the requirement(s) as defined in R28. This requirement is not applicable to seat upholstery assemblies (because seat assemblies are tested according to R18 and R21).

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