

DIN EN ISO 21805:2026-07 (E)

Guidance and recommendations on design, selection and installation of vents to safeguard the structural integrity of enclosures protected by gaseous fire-extinguishing systems (ISO 21805:2023 + Amd 1:2025) (includes Amendment :2026)

Contents	Page
Foreword.....	iv
A1) Foreword to Amendment 1 ^{A1}	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	2
5 Use and limitations	3
6 Safety	4
6.1 Structural safety.....	4
6.2 Personnel safety.....	4
7 System design — Pressure-relief venting	4
7.1 General.....	4
7.2 Extinguishant characteristics.....	5
7.2.1 Positive and negative pressurization.....	5
7.2.2 Pressure graphs.....	5
7.3 Enclosure characteristics.....	6
7.4 Pressure-relief vent paths.....	6
7.5 Types of pressure-relief vents.....	7
7.5.1 General.....	7
7.5.2 Gravity vents.....	7
7.5.3 Counterweighted flap vent.....	7
7.5.4 Electrically-operated vents.....	8
7.5.5 Pneumatically-operated vent.....	8
7.5.6 Vent accessories.....	8
7.6 Pressure-relief vent characteristics.....	9
7.6.1 Vent efficiency.....	9
7.6.2 Minimum opening pressure.....	10
7.6.3 Minimum closing pressure.....	10
7.6.4 Fire rating.....	10
7.7 Vent location and mounting.....	10
7.7.1 Vent location.....	10
7.7.2 Vent mounting.....	11
7.8 Pressure-relief vent area calculations.....	12
7.8.1 Use of agent-specific formulae.....	12
7.8.2 Vent area requirement (non-liquefiable gases).....	13
7.8.3 Vent area requirement carbon dioxide.....	16
7.8.4 Vent area requirements (liquefiable gases).....	16
7.8.5 Leakage.....	22
7.9 Cascade venting calculations.....	22
7.9.1 Example calculation 3: Cascade venting calculations for IG-541 (peak discharge).....	23
7.9.2 Cascade vent arrangements.....	24
7.9.3 Venting into adjacent enclosures.....	25
8 System design — Post-discharge venting	27
9 Acceptance	27
10 Service and maintenance	27
Annex A (informative) Development of agent-specific formulae for liquefiable gases	29
Annex B (informative) Method for development of agent-specific formulae for liquefiable gases	34