

MSA Safety, 40 years of experience in fire & rescue helmets

MSA designs and manufactures the following two types of helmets in France: the GALLET F1XF structural firefighting helmet and the GALLET F2XR helmet for wildland firefighting and technical rescue. MSA has four decades of expertise and experience of the concerns and requirements of firefighters working in these areas.

The original Rescue Helmet was introduced in 1987 and was followed over the years by new generations as latest innovations were introduced.

The Important Certifications to look for in a Rescue Helmet!

EN 16473 – Technical Rescue Standard

The scope of the **Technical Rescue** standard covers the protection of the upper head, against the effects of mechanical hazards such as impact and penetration and flame, electrical and chemical hazards, typically encountered during operations such as:

- ✓ Working in and around collapsed structures
- ✓ Natural disasters (flood, earthquakes etc.)
- ✓ Accidents with hazardous materials (e.g., for use under a chemical protection suit)
- ✓ First aid/ambulance operations, law enforcement
- ✓ Road traffic collisions, railway incidents (e.g., extrication)
- ✓ Rescue at height

EN 16471 – Wildland Firefighting Standard

The scope of the **Wildland Firefighting** standard covers the protection of the upper head, against the effects of impact, penetration, heat, flame and burning embers, while conducting firefighting and associated activities (e.g. wood cutting) in wildland environments.

EN 12492 – Helmets for Mountaineers Standard

The scope of the **Helmets for Mountaineers** standard covers the protection of the upper part of a wearer's head against hazards which may occur during climbing activities for example in the mountains. This standard was developed for climbing in sports activities.

EN 1385, PAS 028 – Water Rescue

Water Rescue is a specific type of application where the helmet is worn during potentially unstable and unpredictable situations. Risks are different since the wearer is on the water, sometimes moving in a craft at low to medium speeds.

Both EN 1385 and PAS 028 should be considered together for a robust helmet that is truly designed for the demanding activities during water rescue.

What about EN 397 Standard?

EN 397 standard alone is **not suitable for technical rescue or wildland firefighting applications** due to several missing performance requirements:

- No Impact testing on the rear of the head
- Lateral deformation test is only optional, whereas required in EN 16473
- Electrical properties test is only optional, whereas required in EN 16473
- No high-speed particle tests
- No radiant heat protection tests
- No tests for falling from a moving vehicle
- No hot solids resistance tests
- No liquid chemicals resistance tests

Is your Helmet certified for Rescue?



GALLET F2XR: Certified for the Right Applications!

A comparison table between GALLET F2XR Certifications and EN397 Standard

RISK	GALLET F2XR Helmet 	Technical Rescue		Water Rescue		Wildland	Industrial Helmet
		EN16473	EN12492	EN1385	PAS028	EN16471	EN397
Falling objects	✓	✓	✓			✓	✓
Falling sharp objects	✓	✓	✓			✓	✓
Resistance to high-speed particles	✓	✓					
Resistance to side compression	✓	✓					✓
Resistance to side impact	✓	✓	✓			✓	
Retention effectiveness (pull-off)	✓	✓	✓	✓		✓	
Helmet floatability	✓			✓	✓		
Anti-strangulation testing	✓	✓				✓	✓
Thermal resistance	✓	✓				✓	
Radiant heat protection	✓					✓	
Flame exposure	✓	✓				✓	✓
Resistance to hot solids	✓					✓	

Is your Helmet certified for Rescue?



RISK	GALLET F2XR Helmet 	Technical Rescue		Water Rescue		Wildland	Industrial Helmet
		EN16473	EN12492	EN1385	PAS028	EN16471	EN397
Ventilation of shell	✓	✓	✓	✓		✓	✓
Resistance to liquid chemicals	✓	✓					
Resistance to electrical hazards	✓	✓					✓
Field of vision performance requirement	✓	✓				✓	

- ✓ - Mandatory performance testing
- ✓ - Optional performance testing

A Global Success

The world’s leading fire & rescue services have chosen GALLET F2XR helmet for their toughest operations. Prominent names such as Paris Fire Brigade, UK USAR teams, Generalitat de Catalunya Spain, Malaysia Civil Defence, Singapore Civil Defence have all placed their trust in MSA Safety to protect their most valuable asset – their firefighters and rescue personnel.