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To Whom it May Concern

Kaiflex Conforms with NORSOK R-004 Requirements for Flexible elastomeric foam (FEF)

NORSOK R-004 is an influential standard developed by the Norwegian petroleum industry that is used around the world to replace oil company specifications for thermal, acoustic, personnel protection, fire protection and pipe penetration insulation.

Section 5.4 of NORSOK R-004 sets technical requirements for flexible elastomeric foam (FEF) insulation. All FEF insulation must meet these technical requirements in order for an installation to claim compliance with NORSOK R-004.

The requirements of NORSOK R-004 for FEF insulation are detailed below:

Property	Standard	Requirement	Kaiflex ST Performance
Maximum ST (+)	EN 14304 4.3.2	Shall always be declared	110
Minimum ST(-)	EN 14304 4.3.3	Shall always be declared	-200
Water absorption	EN 14304 4.3.4	WS	< 0.2%
Water vapour transmission/resistance	EN 14304 4.3.5	$\mu \geq 7,000$	$\geq 10,000$
Trace quantities of water soluble ions and the pH value	EN 14304 4.3.6	CL: To be declared pH: neutral	CL: < 0.02% pH: Neutral

In addition the declared thermal conductivity of Kaiflex must meet or exceed levels set within the NORSOK R-004:

Max Temp. °C	-50	-30	-20	0	10	20	40	70	85
Required λ (W/(m K))	0.031	0.033	0.034	0.036	0.037	0.038	0.040	0.043	0.045
Kaiflex ST λ (W/(m K))	0.029	0.031	0.032	0.034	0.035	0.036	0.038	0.041	0.043

Because Kaiflex meets or exceeds the requirements of NORSOK R-004 for FEF in all areas the product is fully compliant with the NORSOK R-004 standard.

Kaimann declares the technical performance of Kaiflex on all cartons as part of the CE marking process. Test certificates are available on request.

Kind Regards
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