

# ISO/TR 17252:2019-05 (E)

## Fire tests - Applicability of reaction to fire tests to fire modelling and fire safety engineering

---

<b>Contents</b>		<b>Page</b>
	Foreword .....	iv
	Introduction .....	v
<b>1</b>	<b>Scope</b> .....	<b>1</b>
<b>2</b>	<b>Normative references</b> .....	<b>1</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>1</b>
<b>4</b>	<b>Symbols and abbreviated terms</b> .....	<b>1</b>
<b>5</b>	<b>Fire initiation and growth</b> .....	<b>2</b>
5.1	Specification of fires and fire scenarios .....	2
5.1.1	Background .....	2
5.1.2	Design fire types .....	3
5.2	Sensitivity analysis in the design process .....	5
5.3	Limits of applicability .....	6
<b>6</b>	<b>Sources and type of data for input into design</b> .....	<b>6</b>
6.1	Type of data for input into design .....	6
6.2	Complexity of the modelling approach with regard to input data .....	6
6.3	Using ISO/TC 92/SC 1 derived reaction-to-fire tests parameters in models for FSE .....	9
<b>7</b>	<b>Application of test results and limits of applicability</b> .....	<b>11</b>
7.1	Limiting factors affecting experimental quantification of fire growth .....	11
7.2	Repeatability and reproducibility .....	11
7.3	Heat flux measurements .....	11
7.4	Ignition .....	12
7.5	Flame spread .....	12
7.6	Heat release rate .....	12
7.7	Smoke production rate .....	12
7.8	Differences between testing conditions and real fire scenarios .....	13
7.9	Limitations of generalizing product behaviour .....	14
	<b>Annex A (informative) Review of fire test standards</b> .....	<b>15</b>
	<b>Bibliography</b> .....	<b>31</b>