

# ISO 23766:2022-03 (E)

## Thermal insulating products for industrial installations - Determination of the coefficient of linear thermal expansion at sub-ambient temperatures

---

Contents	Page
Foreword.....	iv
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Method A — Optical method.....</b>	<b>1</b>
4.1 Principle.....	1
4.2 Apparatus.....	2
4.2.1 Light source system.....	2
4.2.2 Light detector system.....	2
4.2.3 Test chamber and cooling system.....	2
4.2.4 Temperature-measuring instruments.....	3
4.2.5 Equipment to prepare the test specimen.....	3
4.3 Test specimen.....	3
4.3.1 Dimensions of test specimens.....	3
4.3.2 Preparation of test specimens.....	3
4.3.3 Number of test specimens.....	3
4.4 Conditioning of test specimens.....	3
4.5 Procedure.....	4
<b>5 Method B — Displacement method.....</b>	<b>4</b>
5.1 Principle.....	4
5.2 Apparatus.....	5
5.2.1 Sensor for distance.....	5
5.2.2 Test chamber and cooling system.....	5
5.2.3 Temperature-measuring instruments.....	5
5.2.4 Equipment to prepare the test specimen.....	5
5.3 Test specimen.....	5
5.3.1 Dimensions of test specimens.....	5
5.3.2 Preparation of test specimens.....	5
5.3.3 Number of test specimens.....	6
5.4 Conditioning of test specimens.....	6
5.5 Procedure.....	6
<b>6 Calculation and expression of results.....</b>	<b>6</b>
<b>7 Accuracy of measurement.....</b>	<b>7</b>
<b>8 Test report.....</b>	<b>7</b>
<b>Bibliography.....</b>	<b>9</b>