

# ISO 22477-2:2023-07 (E)

## Geotechnical investigation and testing - Testing of geotechnical structures - Part 2: Testing of piles: Static tension load testing

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms, definitions and symbols .....</b>	<b>1</b>
<b>3.1</b>	<b>Terms, definitions .....</b>	<b>2</b>
<b>3.2</b>	<b>Symbols .....</b>	<b>2</b>
<b>4</b>	<b>Equipment .....</b>	<b>3</b>
<b>4.1</b>	<b>General .....</b>	<b>3</b>
<b>4.2</b>	<b>Reaction device .....</b>	<b>3</b>
<b>4.3</b>	<b>Force Input .....</b>	<b>4</b>
<b>4.3.1</b>	<b>General .....</b>	<b>4</b>
<b>4.3.2</b>	<b>Specifications of force input .....</b>	<b>5</b>
<b>4.4</b>	<b>Measurement of pile head displacements .....</b>	<b>5</b>
<b>4.5</b>	<b>Measurement of pile load .....</b>	<b>6</b>
<b>4.6</b>	<b>Pile instrumentation .....</b>	<b>6</b>
<b>5</b>	<b>Test procedure .....</b>	<b>7</b>
<b>5.1</b>	<b>Test preparation .....</b>	<b>7</b>
<b>5.1.1</b>	<b>Protections .....</b>	<b>7</b>
<b>5.1.2</b>	<b>Construction of a test pile .....</b>	<b>7</b>
<b>5.1.3</b>	<b>Test date .....</b>	<b>8</b>
<b>5.2</b>	<b>Loading procedure .....</b>	<b>8</b>
<b>5.2.1</b>	<b>General .....</b>	<b>8</b>
<b>5.2.2</b>	<b>Load step sequence and duration of load steps for one cycle procedure .....</b>	<b>8</b>
<b>5.2.3</b>	<b>Load step sequence and duration of load steps for multiple cycle procedure .....</b>	<b>9</b>
<b>5.2.4</b>	<b>Maximum test load <math>F_p</math> .....</b>	<b>10</b>
<b>5.2.5</b>	<b>Measuring intervals .....</b>	<b>10</b>
<b>6</b>	<b>Test report .....</b>	<b>11</b>
<b>6.1</b>	<b>General .....</b>	<b>11</b>
<b>6.2</b>	<b>General information .....</b>	<b>11</b>
<b>6.3</b>	<b>Data report .....</b>	<b>12</b>
<b>6.4</b>	<b>Interpretative report .....</b>	<b>13</b>
<b>Annex A (informative)</b>	<b>Critical creep load in tension .....</b>	<b>18</b>
<b>Bibliography .....</b>		<b>19</b>