

# ISO 1927-6:2012-12 (E)

## Monolithic (unshaped) refractory products - Part 6: Measurement of physical properties

---

| <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>Determination of geometric bulk density .....</b>                             | <b>1</b>    |
| 3.1                | Principle .....  | 1           |
| 3.2                | Test pieces .....  | 2           |
| 3.3                | Apparatus .....  | 2           |
| 3.4                | Procedure .....  | 2           |
| 3.5                | Calculation and expression of test results .....                                 | 3           |
| <b>4</b>           | <b>Determination of density and porosity .....</b>                               | <b>3</b>    |
| 4.1                | Principle .....  | 3           |
| 4.2                | Test pieces .....  | 3           |
| 4.3                | Procedure .....  | 3           |
| 4.4                | Calculation .....  | 3           |
| <b>5</b>           | <b>Determination of cold modulus of rupture .....</b>                            | <b>3</b>    |
| 5.1                | Principle .....  | 3           |
| 5.2                | Test pieces .....  | 4           |
| 5.3                | Apparatus and procedure .....  | 4           |
| 5.4                | Test results .....   | 4           |
| <b>6</b>           | <b>Determination of cold crushing strength .....</b>                             | <b>4</b>    |
| 6.1                | Principle .....  | 4           |
| 6.2                | Test pieces .....  | 4           |
| 6.3                | Apparatus .....  | 5           |
| 6.4                | Procedure .....  | 5           |
| 6.5                | Calculation and expression of results .....                                      | 7           |
| <b>7</b>           | <b>Determination of permanent linear change .....</b>                            | <b>7</b>    |
| 7.1                | Principle .....  | 7           |
| 7.2                | Apparatus .....  | 8           |
| 7.3                | Procedure .....  | 8           |
| 7.4                | Calculation .....  | 8           |
| <b>8</b>           | <b>Determination of modulus of rupture at elevated temperatures .....</b>        | <b>9</b>    |
| 8.1                | Principle .....  | 9           |
| 8.2                | Apparatus and procedure .....  | 9           |
| 8.3                | Calculation and expression of results .....                                      | 9           |
| <b>9</b>           | <b>Determination of refractoriness under load and creep in compression .....</b> | <b>9</b>    |
| 9.1                | Principle .....  | 9           |
| 9.2                | Test pieces .....  | 9           |
| 9.3                | Procedure .....  | 9           |
| 9.4                | Calculation and expression of test results .....                                 | 10          |
| <b>10</b>          | <b>Test report .....</b>   | <b>10</b>   |
| Bibliography ..... |  | 11          |