

# ISO/TS 7240-30:2022-07 (E)

## Fire detection and alarm systems - Part 30: Design, installation, commissioning and service of video fire detector systems

---

| <b>Contents</b>    |  | <b>Page</b> |
|--------------------|--|-------------|
| Foreword .....     |  | v           |
| Introduction ..... |  | vi          |
| <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 abbreviated terms .....</b>      | <b>1</b>    |
| <b>3.1</b>         | <b>Terms and definitions .....</b>                         | <b>1</b>    |
| <b>3.2</b>         | <b>Abbreviated terms .....</b>                             | <b>2</b>    |
| <b>4</b>           | <b>Equipment and material .....</b>                        | <b>3</b>    |
| <b>4.1</b>         | <b>Quality of components .....</b>                         | <b>3</b>    |
| <b>4.2</b>         | <b>Standards .....</b>                                     | <b>3</b>    |
| <b>4.3</b>         | <b>Environmental requirements .....</b>                    | <b>3</b>    |
| <b>4.4</b>         | <b>Additional equipment .....</b>                          | <b>3</b>    |
| <b>4.5</b>         | <b>Installation materials .....</b>                        | <b>3</b>    |
| <b>5</b>           | <b>System functionality .....</b>                          | <b>4</b>    |
| <b>5.1</b>         | <b>Responsibility .....</b>                                | <b>4</b>    |
| <b>5.2</b>         | <b>Documentation .....</b>                                 | <b>4</b>    |
| <b>5.3</b>         | <b>Certification .....</b>                                 | <b>4</b>    |
| <b>6</b>           | <b>Design .....</b>  | <b>4</b>    |
| <b>6.1</b>         | <b>Responsibilities .....</b>                              | <b>4</b>    |
| <b>6.2</b>         | <b>Qualifications .....</b>                                | <b>5</b>    |
| <b>6.3</b>         | <b>Documentation required for the design .....</b>         | <b>5</b>    |
| <b>6.4</b>         | <b>Power supply .....</b>                                  | <b>5</b>    |
| <b>6.4.1</b>       | <b>Power supply equipment .....</b>                        | <b>5</b>    |
| <b>6.4.2</b>       | <b>Main power source .....</b>                             | <b>5</b>    |
| <b>6.4.3</b>       | <b>Standby power source .....</b>                          | <b>6</b>    |
| <b>6.5</b>         | <b>Minimum illumination requirements .....</b>             | <b>6</b>    |
| <b>6.6</b>         | <b>VFD smoke detection .....</b>                           | <b>6</b>    |
| <b>6.7</b>         | <b>VFD flame detection .....</b>                           | <b>6</b>    |
| <b>6.8</b>         | <b>Nuisance alarm mitigation for flame and smoke .....</b> | <b>6</b>    |
| <b>6.9</b>         | <b>Coverage consideration .....</b>                        | <b>7</b>    |
| <b>6.9.1</b>       | <b>General .....</b>                                       | <b>7</b>    |
| <b>6.9.2</b>       | <b>Full site monitoring .....</b>                          | <b>7</b>    |
| <b>6.9.3</b>       | <b>Monitoring for smoke detection .....</b>                | <b>7</b>    |
| <b>6.9.4</b>       | <b>Maximum height of obstacles .....</b>                   | <b>7</b>    |
| <b>6.9.5</b>       | <b>Spacing requirements to walls .....</b>                 | <b>8</b>    |
| <b>6.9.6</b>       | <b>Monitoring for flame detection .....</b>                | <b>8</b>    |
| <b>6.9.7</b>       | <b>Area of interest monitoring .....</b>                   | <b>8</b>    |
| <b>6.9.8</b>       | <b>Monitoring for smoke .....</b>                          | <b>8</b>    |
| <b>6.9.9</b>       | <b>Monitoring for flame .....</b>                          | <b>9</b>    |
| <b>6.10</b>        | <b>Detection zones .....</b>                               | <b>9</b>    |
| <b>6.11</b>        | <b>Other considerations .....</b>                          | <b>9</b>    |
| <b>7</b>           | <b>Installation .....</b>                                  | <b>9</b>    |
| <b>7.1</b>         | <b>Responsibility .....</b>                                | <b>9</b>    |

|        |  |    |
|--------|--|----|
| 7.2    | Qualification .....                                      | 9  |
| 7.3    | Certification .....                                      | 10 |
| 8      | Commissioning .....                                      | 10 |
| 8.1    | Responsibility .....                                     | 10 |
| 8.2    | Qualification .....                                      | 10 |
| 8.3    | Procedure .....  | 10 |
| 8.4    | Commissioning report .....                               | 11 |
| 9      | Approvals .....  | 11 |
| 10     | Service .....  | 11 |
| 10.1   | Responsibility .....                                     | 11 |
| 10.2   | Qualifications .....                                     | 11 |
| 10.3   | Service plan .....                                       | 11 |
| 10.3.1 | General .....  | 11 |
| 10.3.2 | Pre-planned maintenance .....                            | 11 |
| 10.3.3 | Precautions .....  | 11 |
| 10.4   | Routine inspection .....                                 | 11 |
| 10.5   | Routine testing .....                                    | 12 |
| 10.6   | Prevention maintenance .....                             | 12 |
|        | Annex A (informative) VFD coverage .....                 | 13 |
|        | Annex B (informative) Example commissioning report ..... | 15 |
|        | Bibliography .....                                       | 18 |