DIN EN 15759-2:2018-03 (E)

Conservation of cultural heritage - Indoor climate - Part 2: Ventilation management for the protection of cultural heritage buildings and co llections

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Step-by-step approach to managing ventilation 10

5 Analysis of ventilation-related risks 11
5.1 General 11
5.2 Ventilation-related risks 11
5.2.1 General 11
5.2.2 Excessive RH fluctuations 12
5.2.3 High RH levels 12
5.2.4 Low RH levels 12
5.2.5 Moisture condensation 12
5.2.6 Water evaporation and salt damage 12
5.2.7 Transport and deposition of air pollutants 12
5.3 Assessing the ventilation-related risks 12
5.3.1 General 12
5.3.2 Condition survey 13
5.3.3 Determination of air exchange rate 13
5.3.4 Assessment of indoor air quality 13

6 Ventilation objective 13

7 Requirements for indoor air quality 14
7.1 General 14
7.2 Indoor climate 14
7.3 Air pollutants 14

8 Ventilation management recommendations 15
8.1 General 15
8.2 Simple adjustments improving the indoor climate 15
8.3 Technical installations 15
8.4 Programmable control systems 15
8.5 Monitoring systems 16
8.6 Complementary measures 16
8.6.1 General 16
8.6.2 Preservation heating 16
8.6.3 Humidification, dehumidification 16
8.6.4 Showcases 17

9 Ventilation management measures implementation 17

10 Ventilation management measures evaluation 17

Annex A (informative) Examples 18

A.1 General 18
A.2 Cultural heritage building housing a museum with a mixed collection 18
A.3 Modern storage facility for archival and library materials using passive climate control ... 20

Annex B (informative) Technical aspects 21

Bibliography 22