ISO 15712-3:2005-01 (E)

Building acoustics - Estimation of acoustic performance of buildings from the performance of elements - Part 3: Airborne sound ins ulation against outdoor sound

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Relevant quantities 2
3.1 Quantities to express building performance 2
3.1.1 Apparent sound reduction index R'45 2
3.1.2 Apparent sound reduction index R'tr,s 2
3.1.3 Standardized level difference D2m,nT 2
3.1.4 Normalized level difference D2m,n 3
3.1.5 Relations between quantities 3
3.2 Quantities to express element performance 3
3.2.1 Sound reduction index R 4
3.2.2 Element normalized level difference Dn,e 4
3.2.3 Other relevant data 4
3.3 Other terms and quantities 4

4 Calculation models 5
4.1 General principles 5
4.2 Determination of direct transmission from acoustic data on elements 6
4.2.1 Small elements 6
4.2.2 Other elements 7
4.3 Determination of flanking transmission 7
4.4 Interpretations 7
4.5 Limitations 8

5 Accuracy 8

Annex A (normative) List of symbols 9

Annex B (informative) Determination of transmission by elements from composing parts 11

Annex C (informative) Influence of façade shape 14

Annex D (informative) Sound reduction index of elements 18

Annex E (informative) Estimation of indoor sound levels 22

Annex F (informative) Calculation examples 23

Bibliography 26