

# ISO 10848-1:2006-04 (E)

## Acoustics - Laboratory measurement of the flanking transmission of airborne and impact sound between adjoining rooms - Part 1: Final document

---

<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 and definitions .....</b>	<b>2</b>
<b>4</b>	<b>Quantities to characterize flanking transmission .....</b>	<b>6</b>
4.1	General .....	6
4.2	Normalized flanking level difference $D_{n,f}$ and normalised flanking impact sound pressure level $L_{n,f}$ .....	6
4.3	Vibration reduction index, $K_{ij}$ .....	6
4.4	Selection of the principle of measurement .....	8
<b>5</b>	<b>Measuring equipment .....</b>	<b>9</b>
<b>6</b>	<b>General requirements for test specimens and test rooms .....</b>	<b>9</b>
<b>7</b>	<b>Measurement methods .....</b>	<b>10</b>
7.1	Measurement of $D_{n,f}$ and $L_{n,f}$ .....	10
7.2	Measurement of the vibration reduction index with structure-borne excitation .....	12
7.3	Measurement of the structural reverberation time .....	15
7.4	Measurement of the vibration reduction index with airborne excitation .....	16
7.5	Frequency range of measurement .....	17
<b>8</b>	<b>Influences from the structures of the test facility .....</b>	<b>17</b>
8.1	Criterion to verify flanking transmissions through constructions of the test facility .....	17
8.2	Conventional limit for light elements compared with the surrounding elements of the test facility .....	18
8.3	Verification procedure for a light flanking element that is structurally independent of a separating element .....	18
<b>9</b>	<b>Shielding .....</b>	<b>18</b>
<b>Annex A (normative) Single-number rating of the vibration reduction index .....</b>		<b>24</b>
<b>Bibliography .....</b>		<b>25</b>