COMMISSION DIRECTIVE

of 7 April 1987

adapting to technical progress Council Directive 84/538/EEC on the approximation of the laws of the Member States relating to the permissible sound power level of lawnmowers

(87/252/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 84/538/EEC of 17 September 1984 on the approximation of the laws of the Member States relating to the permissible sound power level of lawnmowers [1], and in particular Article 8 thereof,

Whereas, in view of experience gained and of the state of the art, it is now necessary to match the requirements of Annex I, Annex II and Annex III to Directive 84/538/EEC to take account the latest progress;

Whereas the measures provided for in this Directive are in accordance with the opinion of the Committee on the Adaptation to Technical Progress of the Directive on the Determination of the Noise Emission of Construction Plant and Equipment, which is competent for Council Directive 84/538/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annex I, Annex II and Annex III, to Directive 84/538/EEC are hereby amended in accordance with the Annex I, Annex II and Annex III to this Directive.

Article 2

The Member States shall, by 1 January 1988, adopt and publish the provisions required to comply with this Directive and shall forthwith inform the Commission thereof.

Article 3

This Directive is addressed to the Member States.

Done at Brussels, 7 April 1987.

For the Commission

Stanley CLINTON DAVIS

Member of the Commission

[1] OJ No L 300, 19. 11. 1984, p. 171.

ANNEX I

AMENDMENTS TO ANNEX I TO DIRECTIVE 84/538/EEC

6.1. **Purpose of the measurement**

6.1.2. At point 6.1.2., the first sentence of the first paragraph shall be reworded as follows:

'The cutting device shall be adjusted to a height of 3 cm. If for technical reasons this is not possible, the cutting device shall be adjusted as close as possible to a height of 3 cm.'

6.2. **Operation of the sound source during the measurement**

At point 6.2, the third paragraph shall be reworded as follows:

'If the cutting device cannot be separated from the driving wheels of the lawnmower, the mower shall be tested either with the mower on supports or while moving and driven by an operator under the following conditions:'

At point 6.2 (b), the second sentence shall be reworded as follows:

'If the lawnmower is powered by a generator or from the mains, the frequency of the supply current, specified for the motor by the manufacturer, shall be stable during the test at ± 1 Hz if the lawnmower is equipped with an induction motor, and the supply voltage at ± 1,0 % of the rated voltage if the lawnmower is equipped with a commutator motor. The supply voltage is measured at the plug of a non-detachable cable or cord, or at the inlet of the lawnmower if a detachable cable is provided. The waveform of the current supplied from the generator shall be similar to that obtained from the mains.'

Paragraph (b) shall be followed by a new paragraph, worded as follows:

'(c) *Lawnmowers which hover or are hand held*

These mowers shall be restrained or supported to achieve their normal working position. The supports shall be made in such a way that they do not influence the measurement results.'

6.3. **Measuring site**

The text of point 6.3 shall be deleted and replaced by points 6.3.1, 6.3.2, 6.3.3 and 6.3.4 as follows:

'6.3.1. *General*

The measuring site must comply with the specifications of points 6.3.2, 6.3.3 or 6.3.4.

In case of dispute, measurements shall be carried out on a measuring site according to point 6.3.2.

6.3.2. *Measurements in the open air on artificial flooring*

The test area must be flat and horizontal. The test area, including the vertical projection of the microphone positions, shall be of concrete or non-porous asphalt covered by an artificial flooring in accordance with Annex A of this Directive, the centre of which coincides with the geometric centre of the hemisphere mentioned in point 6.4 and the corners of which are aimed at the vertical axis of the microphone positions 2, 4, 6 and 8.

If the wheels of the lawnmower could cause a compression of the artificial flooring of more than 1 cm, the wheels shall be placed on supports so that they are level with the artificial flooring before compression. The supports shall be made in such a way that they do not influence the measurement results.

6.3.3. *Measurements in the open air on grass*

The test area must be flat and horizontal. The test area including the vertical projection of the microphone positions shall be covered in grass turf which is not wet.

6.3.4. *Measurements indoors*

The soundfield inside the measurement room shall be similar to that of an acoustical free field, and the value of the constant C shall be determined in accordance with point 8.6.2.

The floor must be flat and horizontal. The test area, including the vertical projection of the microphone positions shall have the acoustical properties of concrete or non-porous asphalt and be covered by an artificial flooring in accordance with Annex A of this Directive, the centre of which coincides with the geometric centre of the hemisphere mentioned in point 6.4 and the corners of which are aimed at the vertical axis of the microphone positions 2, 4, 6 and 8.

If the wheels of the lawnmower could cause a compression of the artificial flooring of more than 1 cm, the wheels shall be placed on supports so that they are level with the artificial flooring before compression. The supports shall be made in such a way that they do not influence the measurement results.'

ANNEX A

ARTIFICIAL FLOORING

1. DIMENSIONS AND MATERIALS

1.1. **Dimensions**

The artificial flooring shall have a size of 360 × 360 cm.

1.2. **Materials**

The artificial flooring is composed of a cover of absorptive material of which the absorption coefficients α, measured in accordance with ISO 354 first edition, 1985-02-01, are within the limits given in the following table :

Frequency/Hz	125	250	500	1 000	2 000	4 000
α minimum	0,00	0,20	0,40	0,60	0,70	0,80
α maximum	0,20	0,40	0,60	0,80	0,90	1,00

Note : An example of a material and construction which can be expected to fulfil these requirements is given in Annex B.
