ANNEX I

Common general framework for the calculation of energy performance of buildings(referred to in Article 3)

1. The energy performance of a building shall be determined on the basis of the calculated or actual annual energy that is consumed in order to meet the different needs associated with its typical use and shall reflect the heating energy needs and cooling energy needs (energy needed to avoid overheating) to maintain the envisaged temperature conditions of the building, and domestic hot water needs.

2. The energy performance of a building shall be expressed in a transparent manner and shall include an energy performance indicator and a numeric indicator of primary energy use, based on primary energy factors per energy carrier, which may be based on national or regional annual weighted averages or a specific value for on-site production.

The methodology for calculating the energy performance of buildings should take into account European standards and shall be consistent with relevant Union legislation, including Directive 2009/28/EC.

3. The methodology shall be laid down taking into consideration at least the following aspects:

(a) the following actual thermal characteristics of the building including its internal partitions:

  (i) thermal capacity;

  (ii) insulation;

  (iii) passive heating;

  (iv) cooling elements; and

  (v) thermal bridges;

(b) heating installation and hot water supply, including their insulation characteristics;

(c) air-conditioning installations;

(d) natural and mechanical ventilation which may include air-tightness;

(e) built-in lighting installation (mainly in the non-residential sector);

(f) the design, positioning and orientation of the building, including outdoor climate;

(g) passive solar systems and solar protection;

(h) indoor climatic conditions, including the designed indoor climate;

(i) internal loads.

4. The positive influence of the following aspects shall, where relevant in the calculation, be taken into account:

(a) local solar exposure conditions, active solar systems and other heating and electricity systems based on energy from renewable sources;

(b) electricity produced by cogeneration;

(c) district or block heating and cooling systems;

(d) natural lighting.

5. For the purpose of the calculation buildings should be adequately classified into the following categories:

(a) single-family houses of different types;

(b) apartment blocks;

(c) offices;

(d) educational buildings;

(e) hospitals;

(f) hotels and restaurants;

(g) sports facilities;

(h) wholesale and retail trade services buildings;

(i) other types of energy-consuming buildings.

ANNEX II

Independent control systems for energy performance certificates and inspection reports

1. The competent authorities or bodies to which the competent authorities have delegated the responsibility for implementing the independent control system shall make a random selection of at least a statistically significant percentage of all the energy performance certificates issued annually and subject those certificates to verification.

The verification shall be based on the options indicated below or on equivalent measures:

(a) validity check of the input data of the building used to issue the energy performance certificate and the results stated in the certificate;

(b) check of the input data and verification of the results of the energy performance certificate, including the recommendations made;

(c) full check of the input data of the building used to issue the energy performance certificate, full verification of the results stated in the certificate, including the recommendations made, and on-site visit of the building, if possible, to check correspondence between specifications given in the energy performance certificate and the building certified.

2. The competent authorities or bodies to which the competent authorities have delegated the responsibility for implementing the independent control system shall make a random selection of at least a statistically significant percentage of all the inspection reports issued annually and subject those reports to verification.

ANNEX III

Comparative methodology framework to identify cost-optimal levels of energy performance requirements for buildings and building elements

The comparative methodology framework shall enable Member States to determine the energy performance of buildings and building elements and the economic aspects of measures relating to the energy performance, and to link them with a view to identifying the cost-optimal level.

The comparative methodology framework shall be accompanied by guidelines outlining how to apply this framework in the calculation of cost-optimal performance levels.

The comparative methodology framework shall allow for taking into account use patterns, outdoor climate conditions, investment costs, building category, maintenance and operating costs (including energy costs and savings), earnings from energy produced, where applicable, and disposal costs, where applicable. It should be based on relevant European standards relating to this Directive.

The Commission shall also provide:

— guidelines to accompany the comparative methodology framework; these guidelines will serve to enable the Member States to undertake the steps listed below,

— information on estimated long-term energy price developments.

For the application of the comparative methodology framework by Member States, general conditions, expressed by parameters, shall be laid down at Member State level.

The comparative methodology framework shall require Member States to:

— define reference buildings that are characterised by and representative of their functionality and geographic location, including indoor and outdoor climate conditions. The reference buildings shall cover residential and non-residential buildings, both new and existing ones,

— define energy efficiency measures to be assessed for the reference buildings. These may be measures for individual buildings as a whole, for individual building elements, or for a combination of building elements,

— assess the final and primary energy need of the reference buildings and the reference buildings with the defined energy efficiency measures applied,

— calculate the costs (i.e. the net present value) of the energy efficiency measures (as referred to in the second indent) during the expected economic lifecycle applied to the reference buildings (as referred to in the first indent) by applying the comparative methodology framework principles.

By calculating the costs of the energy efficiency measures during the expected economic lifecycle, the cost-effectiveness of different levels of minimum energy performance requirements is assessed by the Member States. This will allow the determination of cost-optimal levels of energy performance requirements.

ANNEX IV

PART A

REPEALED DIRECTIVE WITH ITS SUCCESSIVE AMENDMENT

(referred to in Article 29)

Directive 2002/91/EC of the European Parliament and of the Council (OJ L 1, 4.1.2003, p. 65)	
Regulation (EC) No 1137/2008 of the European Parliament and of the Council (OJ L 311, 21.11.2008, p. 1)	only point 9.9 of the Annex

PART B

TIME LIMITS FOR TRANSPOSITION INTO NATIONAL LAW AND APPLICATION

(referred to in Article 29)

Directive	**Time limit for transposition**	**Date of application**
2002/91/EC	4 January 2006	4 January 2009 as regards Articles 7, 8 and 9 only

ANNEX V

CORRELATION TABLE

Directive 2002/91/EC	**This Directive**
Article 1	Article 1
Article 2, point (1)	Article 2, point (1)
—	Article 2, points (2) and (3)
Article 2, point (2)	Article 2, point (4) and Annex I
—	Article 2, points (5), (6), (7), (8), (9), (10) and (11)
Article 2, point (3)	Article 2, point (12)
Article 2, point (4)	Article 2, point (13)
—	Article 2, point (14)
Article 2, point (5)	Article 2, point (15)
Article 2, point (6)	Article 2, point (16)
Article 2, point (7)	Article 2, point (17)

Article 2, point (8)	Article 2, point (18)
—	Article 2, point (19)
Article 3	Article 3 and Annex I
Article 4(1)	Article 4(1)
Article 4(2)	—
Article 4(3)	Article 4(2)
—	Article 5
Article 5	Article 6(1)
—	Article 6(2) and (3)
Article 6	Article 7
—	Articles 8, 9 and 10
Article 7(1) first subparagraph	Article 11(8) and Article 12(2)
Article 7(1) second subparagraph	Article 11(6)
Article 7(1) third subparagraph	Article 12(6)
Article 7(2)	Article 11(1) and (2)
—	Article 11(3), (4), (5), (7) and (9)
—	Article 12(1), (3), (4), (5) and (7)
Article 7(3)	Article 13(1) and (3)
—	Article 13(2)
Article 8, point (a)	Article 14(1) and (3)
—	Article 14(2)
Article 8, point (b)	Article 14(4)
—	Article 14(5)
Article 9	Article 15(1)
—	Article 15(2), (3), (4) and (5)
—	Article 16
Article 10	Article 17
—	Article 18
Article 11, introductory wording	Article 19
Article 11, points (a) and (b)	—
Article 12	Article 20(1) and Article 20(2) second subparagraph
—	Article 20(2) first subparagraph and Article 20(3) and (4)
—	Article 21

Article 13	Article 22
—	Articles 23, 24 and 25
Article 14(1)	Article 26(1)
Article 14(2) and (3)	—
—	Article 26(2)
—	Article 27
Article 15(1)	Article 28
Article 15(2)	—
—	Article 29
Article 16	Article 30
Article 17	Article 31
Annex	Annex I
—	Annexes II to V