

ACTION: For taking a decision in Vilnius

SUBJECT/TITLE

CEN/TC 166 revision /amendment to the answers to the Mandate M/105, the horizontal Mandate M/117 and its subsequent revisions.

SITUATION/BACKGROUND

Decision 12/2014 dated on 2014-05-28 taken at the 46th CEN/TC 166 plenary meeting in VILNIUS considering the documents N 1408, N 1437 and N 1407.
Document N 1532 replaces document N 1407.

PROPOSALS/ACTION TO BE TAKEN

Due to the replacement of the document N 1407 by doc. N 1532 and to the modification/completion of the doc N 1532 during the 46th plenary meeting was necessary to take a decision on confirming the decision 1/2013 with reference to this doc N 1543.

The document N 1532 has been modified / amended during the 46th plenary meeting with the following WI's

G. Subject: WI 00166078

EN 16475-3 – "Accessories - Part 3: Draught regulators/secondary air inlet - Requirements and test methods"

Q. Subject: WI 00166099

EN 16497-2 – "Chimneys - Concrete System Chimneys - Part 2: Balanced flue applications"

Amendment of answer to the mandate/work programme

Document identification: TC166 N1543

Technical Committee TC 166

Date: 2014-05-28

Documents	Reference Number	Date of issue
Mandate number	M 105 as amended (consolidated version) M117 as amended by M134 and further amended by M447 M442	21 st January 2004 6 th July 1999 13 th July 2009 28 th August 2009
Original answer to the Mandate	CEN/TC 166 N 432 (for M 117) CEN TC166 N 275 rev 6 (for M105)	July 1998 January 1998
Commission's acceptance	CEN/TC 166 N 513 (for M 117) EC letter	26 th March 1999 8 th June 1998
Answer to the mandate M105	CEN/TC 166 N 546	February 2000
1 st amendment of the answer to the mandate	CEN/TC166 letter 1709-11.6/F 166.A accepted by EC letter dated 2004-02-13	28 th May 2003
2 nd amendment of the answer to the mandate	CEN/TC166 N940	January 2006
3 ^d amendment	CEN/TC166 N 1408 N1437 and N 1543	March, May 2013 and May 2014

List of changes :

Clause of the original document	Reason for the change (short description)	Supporting information (if relevant)
EN 1457	The standard would be split in two parts	See below the details regarding the scopes and essential characteristics
EN 12446 rev		See below the details regarding the scopes and essential characteristics
EN 1857 rev		See below the details regarding the scopes and essential characteristics
EN 16475	<p>The standard would be split in eight parts. It is a new product standard covering accessories of the chimneys respectively:</p> <ul style="list-style-type: none"> part 1 : silencers part 2: exhaust fans part 3: draft regulators part 4: flue dampers part 5: explosion/implosion relief devices part 6: access components part 7: rain caps part 8: particle filters 	See below the details regarding the scopes and essential characteristics
EN 16497	<p>The standard would be split in two parts. It is a new product standard covering concrete system chimneys respectively:</p> <ul style="list-style-type: none"> part 1 : non balanced flue applications part 2: balanced flue applications 	See below the details regarding the scopes and essential characteristics
EN 13063	The standard would be split in three parts	See below the details regarding the scopes and essential characteristics
EN 1858 rev		See below the details regarding the scopes and essential characteristics

During the plenary meeting of CEN/TC 166 on 22nd and 23rd November 2012 in Niort, France it has been highlighted the necessity of revision or amendment of answers to the mandates, which are hereby explained.

Order to WI (work item) number

A. Subject: WI 00166055

- (i) **Title:**
EN 12446:2011 – "Chimneys - Components - Concrete outer wall elements"
Dates of availability
Stage 60.60: 2011/06/22
- (ii) **Scope:**
This European Standard specifies the material, dimensional and performance requirements for factory made precast concrete outer wall elements for chimneys including outer wall fittings. This European Standard covers elements having up to four passages designated to accommodate a combination of flue liners and/or ventilation passages. This European Standard also relates to storey-height and reinforced outer wall elements. This European Standard does not apply to structurally independent (freestanding or self-supporting) chimneys constructed using these outer wall elements. NOTE Any reference to the term "outer wall element" implies both the outer wall elements and their fittings, except where otherwise indicated
- (iii) **Intended uses:**
Chimney component that surrounds a flue liner to form the outer wall of a chimney or part of a system chimney for conveying products of combustion from heating appliances to the outside atmosphere.

(iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:-
Thermal resistance	Declared value of thermal resistance
Resistance to fire internal to external	Non sootfire resistant products are classified O xx
	Sootfire resistant products are classified G xx
Resistance to fire external to external	In the absence of agreed tests as declared according to National Regulations
Reaction to fire	Classified A1 without test
Compressive strength	Declared structural height
Flexural strength	Declared maximum unsupported height
Durability: resistance to freeze-thaw	Pass/fail
Dangerous substances	None

- (v) **Durability aspects:**
Resistance to freeze-thaw
- (vi) **Other aspects:**
None
- (vii) **Additional information:**
This document supersedes EN 12446:2003. The main modifications to EN 12446:2003 are:
a) a revised table of heat flow values for thermal performance testing which now includes values for high pressure applications, e.g. diesel generators,
b) a test method for the evaluation of Flexural strength under wind loading (clause 8.7 and Test methods clause A.2),
c) a requirement to evaluate the gas tightness of passages used for combustion air (clause 8.8 and Test methods clause A.3),

- d) a requirement relating to the Resistance to fire from an external source (clause 8.9),
 e) a requirement relating to the Release of dangerous substances (clause 8.10).

B. Subject: WI 00166069

- (i) **Title:**
 EN 1857:2010 – "Chimneys - Components - Concrete flue liners"

 Dates of availability
 Stage 60.60: 2010/04/14
- (ii) **Scope:**
 This European Standard specifies the material, dimensional and performance requirements, including methods of test, for precast concrete flue liners and fittings with or without insulation for the construction of multi-wall chimneys. This document does not cover: - high positive pressure (H) designated products; - products designated wet (W) in conjunction with corrosion class 3. This document also applies to storey-height and flue liners reinforced only for handling. NOTE 1 Any reference to the term flue liners implies both flue liners and their fittings, except where otherwise indicated. NOTE 2 The pressure classes and corrosion classes are defined in EN 1443.
- (iii) **Intended uses:**
 Construction of Multi-wall Chimneys for conveying products of combustion from heating appliances to the outside atmosphere.
- (iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:-
Gas tightness/leakage	Declared pressure class
Flow resistance of flue liners	Declared mean roughness (in metres)
Flow resistance fittings	Declared coefficient of flow resistance
Thermal resistance	Declared value of thermal resistance
Resistance to fire	Non sootfire resistant products are classified O
	Sootfire resistant products are classified G
Reaction to fire	Declared class A1
Compressive strength	Declared structural height
Durability: chemicals	Declared condensate resistance class (subject to a threshold value for class W products)
Durability: corrosion	Declared corrosion resistance class (subject to a threshold value for class W products)
Durability: Abrasion	Pass/fail subject to a threshold value
Durability: freeze/thaw	Pass/fail criteria
Dangerous substances	None

- (v) **Durability aspects:**
 Resistance to chemicals, corrosion, abrasion, freeze-thaw
- (vi) **Other aspects:**
 None
- (vii) **Additional information:**

This document supersedes EN 1857:2003. The main modifications to EN 1857:2003 are a revised table of heat flow values for thermal performance testing, the addition of non-sootfire resistant products and the addition of the freeze-thaw characteristic

C. Subject: WI 00166071

- (i) **Title:**
EN 1457-1 – "Chimneys — Clay/ceramic flue liners — Part 1: Flue liners operating under dry conditions - Requirements and test methods "
- Dates of availability
Stage 60.60: 2012/01/25
- (ii) **Scope:**
This European standard is a product standard for clay/ceramic flue liners operating under dry conditions with solid walls or walls with vertical perforations for use in the construction of multiwall chimneys and flue pipes which serve to convey products of combustion from fireplaces or heating appliances to the outside atmosphere by negative or positive pressure. It includes the flue liners used for domestic and industrial chimneys which are not structurally independent (free-standing). This standard specifies the performance requirements for factory made flue liners and chimney fittings. Testing including thermal testing with or without insulation, marking and inspection are covered by this standard. This part does not cover flue liners operating under wet conditions.
- (iii) **Intended uses:**
Chimneys
- (iv) **Essential characteristics according to the mandate which will be dealt with:**
Gas tightness/leakage
Flow resistance
Thermal resistance /dimensioning
Fire resistance
Thermal shock resistance
Resistance to freeze-thaw
Compressive strength
- (v) **Durability aspects:**
Durability against corrosion
Durability against chemicals
- (vi) **Other aspects:**
None
- (vii) **Additional information:**
EN 1457 is split in 2 parts : part 1 "dry conditions" and part 2 "wet conditions"
This standard is covered by mandate M/105

D. Subject: WI 00166072

- (i) **Title:**
EN 1457-2 – "Chimneys — Clay/ceramic flue liners — Part 2: Flue liners operating under wet conditions - Requirements and test methods"
- Dates of availability
Stage 60.60: 2012/01/25
- (ii) **Scope:**
This European standard is a product standard for clay/ceramic flue liners operating under wet conditions with solid walls or walls with vertical perforations for use in the construction of multiwall chimneys and flue pipes which serve to convey products of combustion from fireplaces or heating appliances to the outside atmosphere by negative or positive pressure. It includes the flue liners used for domestic and industrial chimneys which are not structurally independent (freestanding). This standard specifies the performance requirements for factory made flue liners and chimney fittings. Testing including thermal testing with or without insulation, marking and inspection are covered by this standard. Flue liners that are specified to this standard will meet the requirements of EN 1457-1 with the same working temperature, pressure, designation and soot fire resistance.
- (iii) **Intended uses:**
Chimneys
- (iv) **Essential characteristics according to the mandate which will be dealt with:**
Gas tightness/leakage
Flow resistance
Thermal resistance /dimensioning
Fire resistance
Thermal shock resistance
Resistance to freeze-thaw
Compressive strength
- (v) **Durability aspects:**
Durability against corrosion
Durability against chemicals
- (vi) **Other aspects:**
None
- (vii) **Additional information:**
EN 1457 is split in 2 parts : part 1 "dry conditions" and part 2 "wet conditions"
This standard is covered by mandate M/105

E. Subject: WI 00166076

- (i) **Title:**
EN 16475-1 – "Accessories - Part 1: Silencers - Requirements and test methods"

Dates of availability
Stage 00.60: 2009/11/19

It is not sensible to provide Answers to the Mandate for WI 00166076 yet.

The reason is that even if the Scope of the document is amended before the WI reaches stage 45 (dispatch to FV), it would not be possible to list all the Essential characteristics until it is at that stage.

CEN/TC 166/WG 1 will sort this out at that stage and give it to CEN/TC166 a definitive Scope and Essential characteristics as to provide separately the answer to the Mandate for this WI.

F. Subject: WI 00166077

- (i) **Title:**
EN 16475-2 – "Accessories - Part 2: Chimney fans - Requirements and test methods"

Dates of availability
Stage 40.20: 2013/08/08
Stage 40.60: 2014/01/08
Stage 45.99: 2015/03/14

It is not sensible to provide Answers to the Mandate for WI 00166077 yet.

The reason is that even if the Scope of the document is amended before the WI reaches stage 45 (dispatch to FV), it would not be possible to list all the Essential characteristics until it is at that stage.

CEN/TC 166/WG 1 will sort this out at that stage and give it to CEN/TC166 a definitive Scope and Essential characteristics as to provide separately the answer to the Mandate for this WI.

G. Subject: WI 00166078

- (i) **Title:**
EN 16475-3 – "Accessories - Part 3: Draught regulators/secondary air inlet - Requirements and test methods"

Dates of availability
Stage 40.20: 2013/03/14

Stage 40.60: 2013/08/14

Stage 45.99: 2014/09/15

- (ii) **Scope:**
This European standard specifies the requirements and test methods for draught regulators and standstill opening devices that are used as components, carrying flue gases, in order to limit the draught in chimneys and provide secondary air to the chimney.

Draught regulators and standstill opening devices for positive pressure chimneys are not covered by this standard.

It also specifies the requirements for marking, manufacturers' instruction, product information and evaluation of conformity.

- (iii) **Intended uses:**
To limit the draught in chimneys and provide secondary air to the chimneys

- (iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:-
Resistance to fire	Declared classes (O or G or As) determined by heat load according to designation
Flow resistance	Declaration of the draught regulator group.
Thermal shock	Maintenance of flow resistance and shape
Durability against corrosion	Either declared material and thickness or pass-fail criteria (based on a corrosion test).
Condensate resistance	D or W
Dangerous substances	Relevant national regulations

- (v) **Durability aspects:**
Resistance to chemicals, corrosion, and abrasion

- (vi) **Other aspects:**
None

- (vii) **Additional information:**
None

H. Subject: WI 00166079

- (i) **Title:**
EN 16475-4 – "Accessories - Part 4: Flue dampers - Requirements and test methods"

Dates of availability

Stage 00.60: 2009/11/19

It is not sensible to provide Answers to the Mandate for WI 00166079 yet.

The reason is that even if the Scope of the document is amended before the WI reaches stage 45 (dispatch to FV), it would not be possible to list all the Essential characteristics until it is at that stage.

CEN/TC 166/WG 1 will sort this out at that stage and give it to CEN/TC166 a definitive Scope and Essential characteristics as to provide separately the answer to the Mandate for this WI.

I. Subject: WI 00166080

- (i) **Title:**
EN 16475-5 – "Accessories - Part 5: Explosion/implosion relief devices - Requirements and test methods"

Dates of availability
Stage 00.60: 2009/11/19

It is not sensible to provide Answers to the Mandate for WI 00166080 yet.

The reason is that even if the Scope of the document is amended before the WI reaches stage 45 (dispatch to FV), it would not be possible to list all the Essential characteristics until it is at that stage.

CEN/TC 166/WG 1 will sort this out at that stage and give it to CEN/TC166 a definitive Scope and Essential characteristics as to provide separately the answer to the Mandate for this WI.

J. Subject: WI 00166081

- (i) **Title:**
EN 16475-6 – "Accessories - Part 6: Access components – Requirements and test methods"

Dates of availability
Stage 00.60: 2009/11/19

It is not sensible to provide Answers to the Mandate for WI 00166081 yet.

The reason is that even if the Scope of the document is amended before the WI reaches stage 45 (dispatch to FV), it would not be possible to list all the Essential characteristics until it is at that stage.

CEN/TC 166/WG 1 will sort this out at that stage and give it to CEN/TC166 a definitive Scope and Essential characteristics as to provide separately the answer to the Mandate for this WI.

L. Subject: WI 00166088

- (i) **Title:**
EN 16497-1 – "Concrete system chimneys – Part 1: Non-balanced flue applications"
Dates of availability
Stage 40.20: 2012/10/11
Stage 40.60: 2013/03/11
Stage 45.99: 2014/09/15
- (ii) **Scope:**
This European Standard specifies the materials, dimensional and performance requirements for straight concrete system chimneys for non-balanced flue applications comprising a concrete flue liner and a combination of compatible chimney components, which may be concrete flue blocks (see clause 4), obtained or specified from one manufacturing source with product responsibility for the whole chimney. The standard does not apply to concrete system chimneys with back ventilation. This standard does not cover products designated wet (W) in conjunction with corrosion class 3. This European Standard also applies to concrete system chimneys constructed from storey-height elements and flue blocks reinforced for handling.
NOTE
Any reference to the term flue blocks implies both flue blocks and their fittings, except where otherwise indicated.
- (iii) **Intended uses:**
Construction of chimneys for conveying products of combustion from heating appliances to the outside atmosphere
- (iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:
Gas tightness/leakage	Declared pressure class
Flow resistance of flue blocks	Declared mean roughness (in metres)
Flow resistance of fittings	Declared coefficient of flow resistance
Flow resistance of terminals	Declared coefficient of flow resistance
Thermal resistance	Declared value of thermal resistance
Resistance to fire internal to external	Non sootfire resistant products are classified Oxx with the necessary declared distance to combustible materials
	Sootfire resistant products are classified Gxx with the necessary declared distance to combustible materials
Resistance to fire external to external	In the absence of agreed tests as declared according to National Regulations
Reaction to fire	Declared class A1
Compressive strength	Declared structural height
Flexural strength (under wind loading)	Declared maximum unsupported height
Durability: chemicals	Declared condensate resistance class (subject to a threshold value for class W products)
Durability: corrosion	Declared corrosion resistance class (subject to a threshold value for class W products)
Durability: Abrasion	Pass/fail subject to a threshold value
Durability: resistance to freeze-thaw	Pass/fail
Dangerous substances	As indicated in last paragraph and note in clause ZA.3, after example

- (v) **Durability aspects:**
Resistance to chemicals, corrosion, abrasion, and freeze-thaw
- (vi) **Other aspects:**

This standard contains criteria for Terminals

- (vii) **Additional information:**
This standard is based on EN 1858, but includes manufacturer's responsibility for the whole chimney., which may include terminals.

M. Subject: WI 00166090

- (i) **Title:**
EN 13063-1 – "Chimneys - System chimneys with clay/ceramic flue liners - Part 1: Requirements and test methods for sootfire resistance"

Dates of availability
Stage 00.60: 2010/11/17
- (ii) **Scope:**
This European Standard specifies the requirements and test methods for multiwall soot fire resistant system chimneys, working under dry conditions, with corrosion resistance 3, with negative pressure (see EN 1443) in which the products of combustion are conveyed to the atmosphere through clay/ceramic flue liners. Marking and inspection are also covered by this standard. This standard does not apply to structurally independent (free standing or self-supporting) system chimneys. A soot fire resistant system chimney has the following items where appropriate: - clay/ceramic flue liners; - Insulation layer; - outer walls; - mortar for jointing flue liners; - mortar for jointing outer walls; - terminal; - chimney base; - cladding; - opening section; - cleaning and inspection door; - distance piece; - reinforcement. The soot fire resistant chimney covers a combination of compatible chimney components, obtained or specified from one manufacturing source with product responsibility for the whole chimney.
- (iii) **Intended uses:**
Chimneys
- (iv) **Essential characteristics according to the mandate which will be dealt with:**
Resistance to wind load
Compressive strength
Fire resistance
Gas tightness/ leakage
Flow resistance
Dimensioning:thermal resistance
Thermal shock resistance
Resistance to freeze-thaw
- (v) **Durability aspects:**
Durability against corrosion
Durability against chemicals
- (vi) **Other aspects:**
None
- (vii) **Additional information:**
None

N. Subject: WI 00166091

- (i) **Title:**
EN 13063-2 – "Chimneys - System chimneys with clay/ceramic flue liners - Part 2: Requirements and test methods under wet conditions"
- Dates of availability
Stage 00.60: 2010/11/17
- (ii) **Scope:**
This European Standard specifies the requirements and test methods for multiwall system chimneys working under wet conditions (in the following expressed as "wet chimney") with pressure type N1, N2 or P1 according to EN 1443 and a working temperature below or equal T600 according to prEN 13063-1, in which the products of combustion are conveyed to the atmosphere through clay/ceramic flue liners. Marking and inspection are also covered by this document. This European Standard does not apply to structurally independent (free standing or self-supporting) system chimneys. The wet chimney may comprise the following appropriate components: - clay/ceramic flue liners; - insulation layer; - outer walls; - acid resistant mortar for jointing flue liners or elastomeric sealant; - mortar for jointing outer walls; - terminal; - chimney base; - condensate collector; - condensate outlet; - cladding; - opening section; - cleaning and inspection door; - distance piece; - reinforcement. The wet system chimney covers a combination of compatible chimney components, obtained or specified from one manufacturing source with product responsibility for the whole system chimney. NOTE This document does not cover soot fire resistance chimneys.
- (iii) **Intended uses:**
Chimneys
- (iv) **Essential characteristics according to the mandate which will be dealt with:**
Resistance to wind load
Compressive strength
Fire resistance
Gas tightness/ leakage
Flow resistance
Dimensioning:thermal resistance
Thermal shock resistance
Resistance to freeze-thaw
- (v) **Durability aspects:**
Durability against corrosion
Durability against chemicals
- (vi) **Other aspects:**
None
- (vii) **Additional information:**
None

O. Subject: WI 00166054, WI 00166092 and WI 00166104

- (i) **Title:**
EN 1858 :2008+A1:2011 – "Chimneys - Components - Concrete flue blocks"

Dates of availability
Stage 99.60: 2011/06/29 - for WI 00166054

Stage 10.99: 2011/04/22
Stage 60.55: 2011/05/14 – for WI 00166092
Stage 60.60: 2011/06/29

Stage 10.99: 2013/11/22
Stage 20.60: 2014/04/12 – for WI 00166104
Stage 30.99: 2014/11/22

- (ii) **Scope:**
This European Standard specifies the materials, dimensional and performance requirements for precast concrete flue blocks as defined in Clause 3 for use in chimneys. The flue blocks may be of single wall or multi wall construction. The standard does not apply to flue blocks with back ventilation. This standard does not cover products designated wet (W) in conjunction with corrosion class 3. The standard also specifies a type of flue block to dimensionally co-ordinate with masonry unit coursing height, referred to as a type B (Bonding block). This European Standard also applies to storey-height and flue blocks reinforced for handling. NOTE Any reference to the term flue blocks implies both flue blocks and their fittings, except where otherwise indicated.
- (iii) **Intended uses:**
Construction of chimneys for conveying products of combustion from heating appliances to the outside atmosphere
- (iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:-
Gas tightness/leakage	Declared pressure class
Flow resistance of flue blocks	Declared mean roughness (in metres)
Flow resistance of fittings	Declared coefficient of flow resistance
Thermal resistance	Declared value of thermal resistance
Resistance to fire internal to external	Non sootfire resistant products are classified Oxx with the necessary declared distance to combustible materials
	Sootfire resistant products are classified Gxx with the necessary declared distance to combustible materials
Resistance to fire external to external	In the absence of agreed tests as declared according to National Regulations
Reaction to fire	Declared class A1
Compressive strength	Declared structural height
Flexural strength (under wind loading)	Declared maximum unsupported height
Durability: chemicals	Declared condensate resistance class (subject to a threshold value for class W products)

Durability: corrosion	Declared corrosion resistance class (subject to a threshold value for class W products)
Durability: Abrasion	Pass/fail subject to a threshold value
Durability: resistance to freeze-thaw	Pass/fail
Dangerous substances	As indicated in last paragraph and note in clause ZA.3, after example

- (v) **Durability aspects:**
Resistance to chemicals, corrosion, abrasion, and freeze-thaw
- (vi) **Other aspects:**
The Amendment A1:2011 clarifies that this product does not in itself comprise a System chimney
- (vii) **Additional information:**
This document supersedes EN 1858:2008 which superseded EN 1858:2003. The main modifications to EN 1858:2008 is the clarification that this product does not in itself comprise a System chimney.
The main modifications to EN 1858:2003 are:
a) a revised table of heat flow values for thermal performance testing which now includes values for high pressure applications, e.g. diesel generators,
b) a test method for the evaluation of Flexural strength under wind loading (clause 8.10 and Test methods clause A.9),
c) a requirement relating to the Resistance to fire from an external source (clause 8.13),
d) a requirement relating to the Release of dangerous substances (clause 8.14).

P. Subject: WI 00166094

- (i) **Title:**
EN 16475-7 – "Accessories - Part 7: Rain caps - Requirements and test methods"

Dates of availability
Stage 40.20: 2012/08/16
Stage 40.60: 2013/01/16
Stage 45.99: 2014/11/26
- (ii) **Scope:**
This European Standard specifies requirements and test methods for rain caps that are used as components, subject to flue gas, in order to protect against rain entry into the chimney flues.

Rain caps already tested together with system chimney products or other chimney components, e.g. terminals, are not covered by this standard.

It also specifies the requirements for marking, manufacturers' instruction, product information and evaluation of conformity.
- (iii) **Intended uses:**
Protection against rain entry into the chimney flues.

(iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:-
Compressive strength	Pass/fail criteria determined by a threshold load
Resistance to fire	Declared classes (G or O) determined by heat load according to designation
Flow resistance	Coefficient of flow resistance for the rain cap
Thermal shock	Maintenance of flow resistance and shape
Flexural tensile strength	Pass fail criteria determined by threshold value
Durability against corrosion	Either declared material and thickness or pass-fail criteria (based on a corrosion test).
Freeze thaw	Product declaration
Dangerous substances	Relevant national regulations

- (v) **Durability aspects:**
Resistance to chemicals, corrosion, abrasion, and freeze-thaw
- (vi) **Other aspects:**
None
- (vii) **Additional information:**
None

Q. Subject: WI 00166099

- (i) **Title:**
EN 16497-2 – "Chimneys - Concrete System Chimneys - Part 2: Balanced flue applications"

Dates of availability
Stage 00.60: 2012/05/31
- (ii) **Scope:**
This European Standard specifies the materials, dimensional and performance requirements for straight concrete system chimneys for balanced flue applications comprising a concrete flue liner and a combustion air supply duct, and a combination of compatible chimney components, which may be concrete flue blocks (see clause 4), obtained or specified from one manufacturing source with product responsibility for the whole chimney. The standard does not apply to concrete system chimneys with back ventilation. This standard does not cover products designated wet (W) in conjunction with corrosion class 3. This European Standard also applies to concrete system chimneys constructed from storey-height elements and flue blocks reinforced

for handling. NOTE Any reference to the term flue blocks implies both flue blocks and their fittings, except where otherwise indicated.

- (iii) **Intended uses:**
Construction of chimneys for conveying products of combustion from heating appliances to the outside atmosphere in balanced flue applications.

- (iv) **Essential characteristics according to the mandate which will be dealt with:**

Essential Characteristic	Dealt with by:
Gas tightness/leakage	Declared pressure class
Flow resistance of flue blocks	Declared mean roughness (in metres)
Flow resistance of air supply duct	Declared mean roughness (in metres)
Flow resistance of fittings	Declared coefficient of flow resistance
Flow resistance of terminals	Declared coefficient of flow resistance
Thermal resistance	Declared value of thermal resistance
Resistance to fire internal to external	Non sootfire resistant products are classified Oxx with the necessary declared distance to combustible materials
	Sootfire resistant products are classified Gxx with the necessary declared distance to combustible materials
Resistance to fire external to external	In the absence of agreed tests as declared according to National Regulations
Reaction to fire	Declared class A1
Compressive strength	Declared structural height
Flexural strength (under wind loading)	Declared maximum unsupported height
Durability: chemicals	Declared condensate resistance class (subject to a threshold value for class W products)
Durability: corrosion	Declared corrosion resistance class (subject to a threshold value for class W products)
Durability: Abrasion	Pass/fail subject to a threshold value
Durability: resistance to freeze-thaw	Pass/fail
Dangerous substances	As indicated in last paragraph and note in clause ZA.3, after example

- (v) **Durability aspects:**
Resistance to chemicals, corrosion, abrasion, and freeze-thaw
- (vi) **Other aspects:**
This standard contains criteria for Terminals, and provisions for a combustion air supply duct for balanced flue applications
- (vii) **Additional information:**
This standard is based on EN 1858, but includes manufacturer's responsibility for the whole chimney., which may include terminals.

R. Subject: WI 00166101

- (i) **Title:**
EN 13063-3 – "System chimneys with clay/ceramic flue liners — Part 3: Requirements and test methods for air flue system chimneys"

Dates of availability
Stage 00.60: 2012/05/31

- (ii) **Scope:**

This product standard specifies the requirements and test methods for dry (designated D) and/or wet (designated W) air flue system chimneys, including terminals in which the products of combustion are conveyed to the atmosphere through clay/ceramic flue liners and combustion air is conveyed to suitable room-sealed appliances through an air duct or an air gap. It also specifies the requirements for marking, manufacturer's instructions, product information and evaluation of conformity. This standard does not apply to structurally independent (free standing or self-supporting) system chimneys. The air flue system chimney covers a combination of compatible chimney components obtained or specified from one manufacturing source, with product responsibility for the whole chimney.

- (iii) **Intended uses:**
Chimneys

- (iv) **Essential characteristics according to the mandate which will be dealt with:**
Resistance to wind load
Compressive strength
Fire resistance
Gas tightness/ leakage
Flow resistance
Dimensioning:thermal resistance
Thermal shock resistance
Resistance to freeze-thaw

- (v) **Durability aspects:**
Durability against corrosion
Durability against chemicals

- (vi) **Other aspects:**
None

- (vii) **Additional information:**
None