



NSAI

ANNUAL REPORT FOR 2018

**NSAI TECHNICAL COMMITTEE
NSAI/TC 008**

**TIMBER STANDARDS CONSULTATIVE
COMMITTEE**

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1 Chairman's Statement

NSAI/TC 008 met twice in 2018 (with a further meeting deferred) and this was primarily due to the desire to have a meeting where NSAI/TC 008/WG 23 would have something to report on the revision of I.S. 440 "*Timber frame construction, dwellings and other buildings*". The current situation is that a significant amount of fire testing has been undertaken by the timber frame companies and this will result in the revision of I.S. 440 advancing in 2019.

Developments in 2018 of interest to members of NSAI/TC 008 include:

- The publication of SR 82 *Slating and tiling*, although this falls under NSAI/TC 012 "Slating and tiling", the issue of battens is of relevance to NSAI/TC 008 members. Sawmills are participating in a test program on timber battens and it is hoped that new visual and machine grading rules will be developed and probably incorporated into a revision of SR 82.
- The Timber Engineering Research Group at NUIG has received funding from the Department of Agriculture, Food and the Marine to become the primary timber testing and research facility in Ireland. Currently, NUIG are testing secondary timber species with a view to having these species incorporated into EN 1912 *Structural timber – Strength Classes – Assignment of Visual grades and species*. NUIG has also been providing Ireland's representation on WG 1, WG 2 & WG 2/TG 1 in CEN/TC 124.
- David Gil-Moreno has taken on the Secretariat role in CEN/TC 124/WG 1/TG 1 "Grading and strength properties".
- EN 14081-1 *Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements* was published in 2016 but not sanctioned in the Official Journal (OJ) of the EU. This means that the earlier 2005 version, amended in 2011, remains the harmonised standard and the only one with a legal basis. EN 14081-1 is only one of a number of standards that failed to get mentioned in the OJ but the Commission is now taking steps to end this confusing scenario.
- Malcolm Jacob attended CEN/TC 250/SC 5 "Eurocode 5: Design of timber structures" meetings throughout 2018 and has provided committee members with a full account of these meetings. The updating of the Eurocodes will have an important impact on structural design in Ireland and in time will lead to a review of SR 70, SR 71 and I.S. 440.
- Finally, Fergus Moore from the Department of Agriculture, Food and the Marine from the Department attended his first meeting of NSAI/TC 008 in 2018.

Bill Robinson

Chair of NSAI/TC 008

2 Introduction

The work of NSAI/TC 008 is largely focused on the maintenance of national standards as well as contributing to the work of a number of Technical Committees within CEN.

At European level, CEN/TC 124 "Timber structures" is the main area of interest for NSAI/TC 008. The work programme of CEN/TC 124 is currently focussed on the preparation of standards for the structural use of timber covering solid timber, glued laminated timber, glued solid timber, cross laminated timber and other timber and structural wood-based components.

Some of the main benefits, recognised both nationally and at European level, of standardisation in the structural timber area include:

- Standards are expected to remove technical barriers to trade and open markets though out Europe by leading to the trade of CE marked wood products;
- Standards are answering relevant safety, health or environmental concerns in the area of European Construction Regulation by supporting structural Eurocodes;
- Standards provide input values required by the European structural design standard EN 1995. Approximately 41 European Standards are now available for use of timber in structural applications.

During 2018, Ireland has had national experts contributing directly to three areas under CEN/TC 124, namely, test methods (WG 1), solid timber (WG 2) and connectors (WG 4). National input at European level is likely to increase in 2019 with the reactivation of work on wood poles (CEN/TC 124/WG 6).

Because the timber industry in Ireland largely comprises of small and medium size enterprises there is limited expertise available to contribute to the work of standards. Engagement by timber experts is an on-going issue at national and European levels.

Without the support of external funding, it would not be possible for Ireland to input directly to the work of CEN/TC 124.

3 Scope of TC

NSAI/TC 008 "Timber Standards Consultative Committee" provides a representative and strategic forum for the timber industry in Ireland through which participation in European and international technical committees concerned with standards relating to timber for structural and other uses is co-ordinated. Additionally, this committee affords an opportunity for interested parties to participate in the development and review of national standards.

NSAI/TC 008 has, as one of its main roles, the function of advising NSAI on standard developments relating to the timber industry at national, European and international levels.

Through the work of NSAI/TC 008 a number of CEN and ISO committees and associated Working Groups are monitored – see Table 1.

Table 1 – CEN and ISO Technical Committees and Working Groups

Committee Name	Committee Title
CEN/TC 124	Timber structures
CEN/TC 124/WG 1	Test methods
CEN/TC 124/WG 2	Solid timber
CEN/TC 124/WG 3	Glued laminated timber
CEN/TC 124/WG 4	Connectors
CEN/TC 124/WG 5	Prefabricated wall, floor and roof elements
CEN/TC 124/WG 6	Wood poles
CEN/TC 38	Durability of wood and wood-based products
CEN/TC 112	Wood-based panels
CEN/TC 175	Round and sawn timber
ISO/TC 89	Wood-based panels
ISO/TC 165	Timber structures

4 Structure and Membership

4.1 Structure

Figure 1 below illustrates the structure of the Committee.

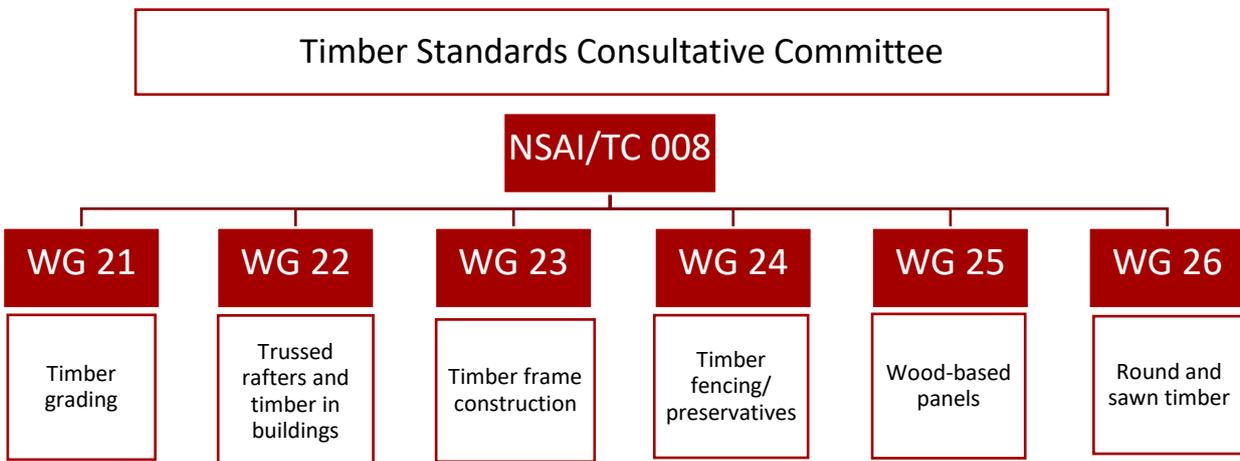


Figure 1 – Structure of NSAI/TC 008

4.2 Members

Table 2 lists the membership for 2018.

Table 2 – Member list for 2018

Name	Organisation	Role
Bill Robinson	Timber Design Services	Chair
Alan Armstrong	TRA	Member
Annette Harte	NUI, Galway	Member
Barry Mathews	NSAI, Certification	Member
Bob Davis	Bob Davis & Associates	Member
Colin Short	Consultant Engineer	Member
Conor Taaffe	HomeBond	Member
David Gil-Moreno	NUI, Galway	Member
Dermot Murphy	Glennon Brothers	Member
Des O'Toole	Coillte	Member
Eamonn Smyth	Dept. of Housing, Planning, Community and Local Government	Member
Fergus Moore	Dept. of Agriculture, Food & the Marine	Member
Gary Treanor	ITFMA	Member
Malcolm Jacob	Consultant Engineer	Member
Peter DeLacy Staunton	TFM	Member
Sean Armstrong	Dept. of Housing, Planning, Community and Local Government	Member

5 Summary of 2018 Activities

5.1 National

5.1.1 Meetings

Committee meetings held in NSAI during 2018 are shown in Table 3.

Table 3 – Committee meetings held in 2018

Meeting No.	Date	Comment
1	24 May 2018	
-	25 September 2018	Meeting deferred due to other commitments
2	15 November 2018	

5.1.2 National Work

NSAI/TC 008 is currently engaged in:

- a review of standards for timber products which have been published for more than 5 years;

- continued monitoring of ballots from CEN/TC 124 "Timber structures" as well as CEN/TC 112 "Wood-based panels" & CEN/TC 175 "Round and sawn timber";
- on-going monitoring of work by its active Working Groups;
- recruitment of experts to CEN Technical Committees in the timber area; and
- recruitment of new members to NSAI/TC 008.

5.2 International

5.2.1 Meetings

Table 4 lists the meetings of CEN/TC 124 and its Working Groups attended by members during 2018.

Table 4 – CEN/TC 124 and Working Group meetings attended

Committee Name	Location	Date	No. of Attendees
CEN/TC 124/WG 1	Virtual meeting	12 th January 2018	1
CEN/TC 124/WG 1	Edinburgh, Scotland	22/23 March 2018	1
CEN/TC 124/WG 2/TG 1	Virtual meeting	April 2018	1
CEN/TC 124/WG 4	Copenhagen, Denmark	24 April 2018	1
CEN/TC 124 Plenary	Milan, Italy	15/16 May 2018	1
CEN/TC 124/WG 2/TG 1	Virtual meeting	July 2018	1
CEN/TC 124/WG 2/TG 1	Virtual meeting	October 2018	1
CEN/TC 124/WG 2	Paris, France	4/5 December 2018	1

5.2.2 International Work

In 2018, the CEN/TC 124 work programme consisted of the following registered work items:

- FprEN 14734, *Timber structures - Laminated veneer lumber (LVL) – Requirements*;
- FprEN 14592, *Timber structures - Dowel-type fasteners – Requirements*;
- prEN 12512rev, *Timber structures - Test methods - Cyclic testing of joints made with mechanical fasteners*;
- prEN 13271 rev, *Timber fasteners - Characteristic load-carrying capacities and slip-moduli for connector joints*;
- prEN 14229 rev, *Structural timber - Wood poles for overhead lines*;
- prEN 14250 rev, *Timber structures - Product requirements for prefabricated structural members assembled with punched metal plate fasteners*;
- prEN 14545 rev, *Timber structures - Connectors – Requirements*;
- prEN 15736 rev, *Timber structures - Test methods - Withdrawal capacity of punched metal plate fasteners in handling and erection of prefabricated trusses*;
- prEN 16351 rev, *Timber structures - Cross laminated timber – Requirements*;
- prEN 1912 rev, *Structural Timber - Strength classes - Assignment of visual grades and species*;
- prEN 409 rev, *Timber structures - Test methods - Determination of the yield moment of dowel type fasteners*;

- prEN 594 rev, *Timber structures - Test methods - Racking strength and stiffness of timber frame wall panels*;
- prEN 912 rev, *Timber fasteners - Specifications for connectors for timbers*;
- prEN ISO 8970, *Timber structures - Testing of joints made with mechanical fasteners - Requirements for timber density (ISO/DIS 8970:2018)*
- WI 00124170, *Timber structures - Glued laminated timber and glued solid timber made from hardwood species – Requirements*.

5.2.3 International Standards Reviewed

The following standards from CEN/TC 124 were reviewed during 2018:

- **EN 384:2016/prA1** *Structural timber - Determination of characteristic values of mechanical properties and density*;
- **FprEN 14081-2** *Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine grading; additional requirements for type testing*;
- **FprEN 14592** *Timber structures - Dowel-type fasteners – Requirements*;
- **FprEN 16929** *Test Methods - Timber floors - Determination of vibration properties*;
- **EN 14080:2013** *Timber structures - Glued laminated timber and glued solid timber – Requirements*;
- **EN 383:2007** *Timber Structures - Test methods - Determination of embedment strength and foundation values for dowel type fasteners*;
- **EN 408:2010+A1:2012** *Timber structures - Structural timber and glued laminated timber - Determination of some physical and mechanical properties*;
- **prEN ISO 8970** *Timber structures - Testing of joints made with mechanical fasteners - Requirements for timber density (ISO/DIS 8970:2018)*;
- **EN 314-2:1993** *Plywood - Bonding quality - Part 2: Requirements*;
- **EN 326-3:2003** *Wood-based panels - Sampling, cutting and inspection - Part 3: Inspection of an isolated lot of panels*.

5.2.4 International Voting Results

The following ballots from CEN/TC 124 closed during 2018:

- Decision C425 - Request for Class + Thresholds for EN 14592 *Timber structures - Dowel-type fasteners - Requirements*;
- Decision C426 - new answer to the mandate for EN 14592 *Timber structures - Dowel-type fasteners - Requirements*;
- EN 384:2016/prA1 *Structural timber - Determination of characteristic values of mechanical properties and density*;
- Decision C427 - Decision to skip formal vote for EN 384-prA1;
- Decision C430 - answer to the mandate for EN 16351;
- **FprEN 14081-2** *Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine grading; additional requirements for type testing*;
- Decision C431 - answer to the mandate M112 for EN 14374;
- Decision C432 - answer to the mandate M113 for EN 14374;
- Decision C433 - request introduction new classes EN 14374;
- Draft Decision C437 Activation PWI for revision of EN 14545;
- **FprEN 14592** *Timber structures - Dowel-type fasteners – Requirements*;

- Decision C438 - Rev request for classes & three for EN 14592;
- Decision C434 - Creation of a TG (CEN/TC 124 / WG 6 / TG 1);
- Decision C435 - Creation of new product standard for I-beams;
- Decision C436 - Creation of a TG (CENTC 124 WG 3 TG 2);
- FprEN 16929 *Test Methods - Timber floors - Determination of vibration properties*;
- Decision C439 - Rev answer to the mandate for EN 16351;
- Decision C440 - answer to the mandate M112 for EN 14374 v2;
- Decision C441 - answer to the mandate M113 for EN 14374 v2;
- EN 14080:2013 *Timber structures - Glued laminated timber and glued solid timber – Requirements*;
- EN 383:2007 *Timber Structures - Test methods - Determination of embedment strength and foundation values for dowel type fasteners*;
- EN 408:2010+A1:2012 *Timber structures - Structural timber and glued laminated timber - Determination of some physical and mechanical properties*;
- prEN ISO 8970 *Timber structures - Testing of joints made with mechanical fasteners - Requirements for timber density (ISO/DIS 8970:2018)*;
- Decision C442 - 2nd FV + 9 months tolerance request for EN 14592.

All of the above ballots were approved by CEN/TC 124 members.

5.3 Regulatory Development/Update

Currently, NSAI/TC 008/WG 23 "Timber frame construction" is engaged in the revision of I.S. 440:2009+A1:2014 *Timber frame construction, dwellings and other buildings* which is referenced in Technical Guidance Document A (Structure) published by the Department of Housing, Planning and Local Government.

6 Publications and Reviews

6.1 Publications

During 2018, CEN Technical Committees 38, 112, 124 and 175 published the following standards:

CEN/TC 38

- **CEN/TS 15119-1:2018** *Durability of wood and wood-based products - Determination of emissions from preservative treated wood to the environment - Part 1: Wood held in the storage yard after treatment and wooden commodities exposed in Use Class 3 (not covered, not in contact with the ground) - Laboratory method*;
- **CEN/TC 16818:2018** *Durability of wood and wood-based products - Moisture dynamics of wood and wood-based products*.

CEN/TC 112

Did not publish any standards during 2018.

CEN/TC 124

- **EN 14081-2:2018**, *Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine grading; additional requirements for type testing;*
- **EN 14081-3:2012+A1:2018**, *Timber structures - Strength graded structural timber with rectangular cross section - Part 3: Machine grading; additional requirements for factory production control;*
- **EN 16929:2018**, *Test methods - Timber floors - Determination of vibration properties;*
- **EN 384:2016+A1:2018**, *Structural timber - Determination of characteristic values of mechanical properties and density.*

CEN/TC 175

- **EN 1309-3:2018** *Round and sawn timber - Methods of measurements - Part 3: Features and biological degradations;*
- **EN 13576:2018** *Wood flooring and parquet – Terminology;*
- **EN 16755:2017/AC:2018** *Durability of reaction to fire performance - Classes of fire-retardant treated wood products in interior and exterior end use applications.*

6.2 Reviews

A review of I.S. 158:1987 "Closed string wood stairs" is expected to conclude in 2019.

7 **Work programme for 2019 onwards**

7.1 National work

- Continue to support the attendance of national experts at CEN Technical Committee and Working Group meetings;
- NSAI/TC 008/WG 23 to further work on the revision of I.S. 440:2009+A1:2104 "*Timber frame construction, dwellings and other buildings*";
- NSAI/TC 008/WG 23 will continue to track the work of CEN/TC 124/WG 05 in relation to the development of EN 14732 "*Timber structures - Structural prefabricated wall, floor and roof elements - Requirements*";
- NSAI/TC 008/WG 24 to commence a revision of I.S. 436:2007 "*Farm fencing - Timber post and wire*";
- NSAI/TC 008/WG 24 to undertake a review of I.S. 437:2008 "*Horse and stud fencing - Timber post and rail*";
- NSAI/TC 008/WG 21 will determine the need for an amendment to I.S. 127:2015 "*Structural timber - Visual strength grading - Sawn softwoods with rectangular cross-section*" in order to bring marking requirements into line with those in EN 14081-1:2016 "*Timber structures - Strength graded structural timber with rectangular cross section - Part 1: General requirements*". This determination will be made as soon as EN 14081-1:2016 is cited in the Official Journal (OJ);
- NSAI/TC 008 will complete a review of I.S. 158:1987 "*Closed string wood stairs*".

7.2 International work

NSAI/TC 008 will continue to input as necessary to the CEN/TC 124 work programme listed in Section 5.2.2 of this report and will also monitor the following CEN/TC 124 preliminary work items which have been registered:

- prEN 12512rev, *Timber structures - Test methods - Cyclic testing of joints made with mechanical fasteners*;
- prEN 13271 rev, *Timber fasteners - Characteristic load-carrying capacities and slip-moduli for connector joints*;
- prEN 14229 rev, *Structural timber - Wood poles for overhead lines*;
- prEN 14250 rev, *Timber structures - Product requirements for prefabricated structural members assembled with punched metal plate fasteners*;
- prEN 14545 rev, *Timber structures - Connectors – Requirements*;
- prEN 15736 rev, *Timber structures - Test methods - Withdrawal capacity of punched metal plate fasteners in handling and erection of prefabricated trusses*;
- prEN 16351 rev, *Timber structures - Cross laminated timber – Requirements*;
- prEN 1912 rev, *Structural Timber - Strength classes - Assignment of visual grades and species*;
- prEN 409 rev, *Timber structures - Test methods - Determination of the yield moment of dowel type fasteners*;
- prEN 594 rev, *Timber structures - Test methods - Racking strength and stiffness of timber frame wall panels*;
- prEN 912 rev, *Timber fasteners - Specifications for connectors for timbers*;
- prEN ISO 8970, *Timber structures - Testing of joints made with mechanical fasteners - Requirements for timber density (ISO/DIS 8970:2018)*;
- WI 00124170, *Timber structures - Glued laminated timber and glued solid timber made from hardwood species – Requirements*.

8 Additional Information

- ✚ New member Mr. Fergus Moore (Dept. of Agriculture, Food and the Marine) was welcomed to NSAI/TC 008 during 2018.
- ✚ Mr. Sean Armstrong (Dept. of Housing, Planning, Community and Local Government) has taken over from Mr. John Wickham on NSAI/TC 008.
- ✚ In September, it was decided that Ireland will host the next plenary meeting of CEN/TC 124 in Dublin on May 14th and 15th, 2019.
- ✚ David Gil-Moreno has taken on the Secretariat role in CEN/TC 124/WG 1/TG 1 "Grading and strength properties".
- ✚ At a meeting of CEN/TC 124/WG 2 in December'18, it was agreed that the next meeting of WG 2/TG 1 "Grading and strength properties" on March 19/20, 2019, will be hosted in NUIG, Galway.