MLIT, Housing Bureau, Building Guidance No. 3408
Heisei 24 (2012) February 6

Attention to:
CEN:
Mr. Frederic ROUGER
Norsk Treteknisk Institutt:
Mr. Erik AASHEIM
SP Techinical Research Institute of Sweden:
Ms. Maria KHORSAND

Director-General
Housing Bureau
Ministry of Land, Infrastructure and Transport

Re: Designation of specified strength for lumbers that comply with EN 14081 by NTI and SP for visual graded structural lumber and machine graded structural lumber, based upon a category of Clause 7 of Notification No 1452 of the Ministry of Construction/May 31, 2000.

Please be notified that specified strength has been designated as attached Certificate of Designation, for lumbers that comply with EN 14081 by NTI and SP for visual graded structural lumber and machine graded structural lumber based upon a category of Clause 7 of Notification No, 1452 of the Ministry of Construction/May 31, 2000.
Upon your conformity assessment, please pay special attention to the following and acknowledge related members in this matter.

1. Please ensure quality of the lumbers by carrying out adequate conformity assessment.
2. Please notify us without delay when the following changes occur:
   1) When there is any change in the Standard.
   2) When you are withdrawn from the notification by the European Commission.

I. Visual graded structural lumber

Standard of Strength of the lumbers that comply with the European standard indicated by the Certification Organizations for species as indicated in Table 1, for compression, tensile, bending, and shear are the values as in Table 2 multiplied by the values as in Table 3. And in the case of parallel members, the value of the standard strength against bending Fb may be multiplied by 1.25 in cases where structural plywood or other sheathing panels of equal or superior quality is attached to the said group of members, and may be multiplied by 1.15 in other cases.

Table 1

Standard	Certification Organization	Species	Species in Japanese	Species code
		Spruce (Picea abies)	スプルース	PCAB
		Scots Pine (Pinus sylvestris)	オウシュウアカマツ	PNSY

NTI、SP are the following institutions:

NTI： Norsk Treteknisk Institutt ID:1070

SP：Sveriges Tekniska Forskningsinstitutt AB ID:0402

Table 2

Species	Specified Strength（N/mm^2）				
	Visual grade	圧縮 F_c	引張り F_t	曲げ F_b	せん断 F_s
PCAB	C14	16.0	8.8	15.4	1.8
	C16	17.0	11.0	17.6	1.8
	C18	18.0	12.1	19.8	1.8
	C20	19.0	13.2	22.0	1.8
	C22	20.0	14.3	24.2	1.8
	C24	21.0	15.4	26.4	1.8
	C27	22.0	17.6	29.7	1.8
	C30	23.0	19.8	33.0	1.8
PNSY	C14	16.0	8.8	15.4	1.8
	C16	17.0	11.0	17.6	1.8
	C18	18.0	12.1	19.8	1.8
	C20	19.0	13.2	22.0	1.8
	C22	20.0	14.3	24.2	1.8
	C24	21.0	15.4	26.4	1.8
	C27	22.0	17.6	29.7	1.8
	C30	23.0	19.8	33.0	1.8

Table 3

	Fc	Ft	Fb	Fs
104 204 404	1.0	1.00	1.00	1.0
106 206 406	0.96	0.84	0.91	
208 408	0.93	0.75	0.86	
210	0.91	0.68	0.82	
212	0.89	0.63	0.79	
Other dimensions	$\left(\frac{89}{h}\right)^{0.1}$	$\left(\frac{89}{h}\right)^{0.4}$	$\left(\frac{89}{h}\right)^{0.4}$	

h is longer side of the dimension (mm)

II. Machine graded structural lumber

Standard of Strength of the lumbers that comply with the European standard indicated by the Certification Organizations for species as indicated in Table 1, for compression, tensile, bending, and shear are the values as in Table 2 multiplied by the values as in Table 3. And in the case of parallel members, the value of the standard strength against bending Fb may be multiplied by 1.25 in cases where structural plywood or other sheathing panels of equal or superior quality is attached to the said group of members, and may be multiplied by 1.15 in other cases.
Machine graded structural lumber shall be graded only by machine controlled system.

Table 1

Standard	Certification Organization	Species	Species in Japanese	Species code
EN-14081	NTI SP	Spruce (Picea abies)	スプルース	PCAB
		Scots Pine (Pinus sylvestris)	オウシュウアカマツ	PNSY

NTI、SP are the following institutions:

NTI： Norsk Treteknisk Institutt ID:1070

SP：Sveriges Tekniska Forskningsinstitutt AB ID:0402

Table 2

Species	Specified Strength（N/mm^2）				
	Machine grade	F_c	F_t	F_b	F_s
PCAB	C14	16.0	8.8	15.4	1.8
	C16	17.0	11.0	17.6	1.8
	C18	18.0	12.1	19.8	1.8
	C20	19.0	13.2	22.0	1.8
	C22	20.0	14.3	24.2	1.8
	C24	21.0	15.4	26.4	1.8
	C27	22.0	17.6	29.7	1.8
	C30	23.0	19.8	33.0	1.8
	C35	25.0	23.1	38.5	1.8
	C40	26.0	26.4	44.0	1.8
	C45	27.0	29.7	49.5	1.8
PNSY	C14	16.0	8.8	15.4	1.8
	C16	17.0	11.0	17.6	1.8
	C18	18.0	12.1	19.8	1.8
	C20	19.0	13.2	22.0	1.8
	C22	20.0	14.3	24.2	1.8
	C24	21.0	15.4	26.4	1.8
	C27	22.0	17.6	29.7	1.8
	C30	23.0	19.8	33.0	1.8
	C35	25.0	23.1	38.5	1.8
	C40	26.0	26.4	44.0	1.8
	C45	27.0	29.7	49.5	1.8

Table 3

	Fc	Ft	Fb	Fs
104 204 404	1.0	1.00	1.00	1.0
106 206 406	0.96	0.84	0.91	
208 408	0.93	0.75	0.86	
210	0.91	0.68	0.82	
212	0.89	0.63	0.79	
Other dimensions	$\left(\frac{89}{h}\right)^{0.1}$	$\left(\frac{89}{h}\right)^{0.2}$	$\left(\frac{89}{h}\right)^{0.2}$	

h is longer side of the dimension (mm)