



RAK PIN-3554/4 F4 LUHA

KASUTUSKLASS

2

KOORMUSPINNA LAIUS (kand.samm)

800 mm

KOORMUSED (ilma sêrestiku omakaaluta)

lumekoormus (maapinnal)

1,50 kN/m<sup>2</sup>

ülemise vöö alaliskoormus

0,65 kN/m<sup>2</sup> (kivi)

alumise vöö alaliskoormus

0,45 kN/m<sup>2</sup>

tuulekoormus

0,60 kN/m<sup>2</sup>

AV. LÄPLIK LÄBIPAIN

11 mm L/300= 35 mm

ALUMISE VÖÖ OTSTE HORIS.PAIGUTISTE SUMMA

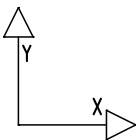
4 mm

ÜLEMISE VÖÖ NÄTKEPIKKUS

1050 mm Oper.rate of b.s.(Sidew.)1.00

Max.dist. of buckl.s. of the B.chord

3000 mm Oper.rate of b.s.(Sidew.) .38



Standardid,määrused,juhendid / Eurokoodeksi kohane meetod

EN 1990:2002, EN 1995-1-1:2004+A1+AC:2008+A2:2014, EN 1995-1-2+AC:2004

EN 1991-1-1:2002, EN 1991-1-2:2004, EN 1991-1-3:2006, EN 1991-1-4:2005

Sovellusohjeet: RIL 205-2017, RIL 201-2017, RIL 248-2013

NAULALEVYRAKENTEIDEN SUUNNITTELU SOVELLUSOHJE 1.2.2017 / Inspecta Sertifiointi Oy

PROJEKTEERIMISEL KASUTATUD PROGRAMM: WoDe2000 24.04.2017

Inspecta Sertifiointi Oy on käesoleva ogaplaatkonstruktsioonide  
projekteerimisjuhendi läbi vaadanud ja heaks kiitnud 31. mai 2017

OGAPLAADID

Arvamus Kehtivusaeg

LL13

VTT-S-02366-17 31. 5.2022

ASETUS :Kui ei ole teisiti märgitud siis asetatakse sümmeetriliselt

sêlme suhtes. Ogaplaadi peasuund on näidatud joonega --

Ogaplaadi paigaldustolerants 10mm

Ogaplaadi paigalduskoht (●) elemendi serval.

KVALITEEDIKONTROLLI- JA VALMISTAMISE PÄEVIK  
VALMISTAMISE EEST VASTUTAB \_\_\_\_\_ TUG.KL.-JA.TUNNUS \_\_\_\_ SêRMJ.TUNNUS \_\_\_\_

| OK=heaks kiidetud          | Toler. | OK  | Märkused |
|----------------------------|--------|-----|----------|
| Konstr. pikkus             | +-10   |     |          |
| kêrgus h1                  | +-10   |     |          |
| h2                         | +-10   |     |          |
| Elementide asukoht         |        |     |          |
| Puumaterjali dimens.       |        |     |          |
| Ogaplaatide asetuse suurus | +-10   |     |          |
| suurus                     |        |     |          |
| puutufungimine             |        |     |          |
| Pitud sêlmedes             |        |     |          |
| Eeltêus                    |        |     |          |
| Niiskusprotsendid          | MIN    | MAX |          |
| Ülemine vöö                |        |     |          |
| Alumine vöö                |        |     |          |
| Vêrguvardd                 |        |     |          |
| Tugevusklass               |        |     |          |

VALMISTUSKUUPÄEV \_\_\_ / \_\_\_ 20\_\_\_ VAHETUS \_\_\_\_\_ VALM. ARV \_\_\_\_\_

Tukireaktioiden ominaisarvot tuenta- ja kuormitustapauksittain sekä kattotuolin vaatimat tukileveydet.

| Tuenta Kuorm. | Aikal. | Tuki1    | 2            |
|---------------|--------|----------|--------------|
| A             | Omap.  | Pysyvâ Y | 6,1 6,1 kN   |
|               | Lumi 1 | Keskip Y | 5,9 5,9 kN   |
|               | Lumi 2 | Keskip Y | 5,8 4,6 kN   |
|               | Lumi 3 | Keskip Y | 4,6 5,8 kN   |
|               | Tuuli1 | Hetkel Y | -0,0 -0,9 kN |
|               |        | X        | -,7 - kN     |
|               | Tuuli2 | Hetkel Y | -,9 -0,0 kN  |
|               |        | X        | ,7 - kN      |
|               | Tuuli3 | Hetkel Y | -2,2 -2,2 kN |

| Tukileveys   | 124      | 124          |
|--------------|----------|--------------|
| Td           | Keskip Y | 15,9 15,9 kN |
| Td kok.tuuli | Hetkel X | 1,7 0,0 kN   |
| Td lmu       | Hetkel Y | 2,2 2,2 kN   |
| Runko (C24)  | 79       | 79 mm        |
| Runko (C30)  | 73       | 73 mm        |

| PUITELEMENTIDE ARVUTUS |           |         |      |       |         |      |        |       |             |       |
|------------------------|-----------|---------|------|-------|---------|------|--------|-------|-------------|-------|
| Element nr             | bhx klass | lugevus | Od   | Od/Rd | side lk | kc   | Nd kN  | Nd/Rd | Md Md/Rd Nm | Summa |
| Alumine vöö:           |           |         |      |       |         |      |        |       |             |       |
| 1                      | 45x95     | C24     | .93  | .13   | --      | 1.00 | 18.96  | .47   | 143 .13     | .60   |
| 2                      | 45x95     | C24     | .65  | .12   | --      | 1.00 | 19.00  | .47   | 215 .20     | .67   |
| Ülemine vöö:           |           |         |      |       |         |      |        |       |             |       |
| 31                     | 45x95     | C24     | 1.49 | .21   | --      | .93  | -11.64 | .23   | 471 .33     | .56   |
| 32                     | 45x120    | C24     | 1.63 | .18   | --      | .90  | -4.54  | .07   | 597 .36     | .43   |
| 33                     | 45x120    | C24     | 2.53 | .29   | --      | .71  | -19.41 | .39   | 678 .41     | .80   |
| Vêrguvarddad:          |           |         |      |       |         |      |        |       |             |       |
| 61                     | 45x195    | C24     | -.59 | .04   | 0       | 1.00 | -14.45 | .13   | -164 .04    | .17   |
| 62                     | 45x70     | C24     | .04  | .01   | 0       | 1.00 | 10.99  | .35   | 18 .03      | .38   |
| 63                     | 45x70     | C24     | .01  | 0.00  | 0       | .27  | -6.12  | .56   | -17 .02     | .58   |
| 64                     | 45x70     | C24     | .02  | .01   | 0       | 1.00 | 5.36   | .17   | -16 .02     | .19   |
| 65                     | 45x95     | C24     | .18  | .03   | 0       | .40  | -11.07 | .51   | 164 .10     | .61   |
| 66                     | 45x70     | C24     | .01  | 0.00  | 0       | 1.00 | 2.36   | .07   | -18 .03     | .10   |
| 67                     | 45x95     | C24     | .09  | .01   | 0       | .14  | -6.16  | .81   | -72 .05     | .86   |
| 68                     | 45x70     | C24     | .02  | 0.00  | 0       | 1.00 | .90    | .03   | -19 .03     | .06   |

| SêLMEDE ARVUTUS   |       |         |         |            |            |                      |               |           |           |           |
|-------------------|-------|---------|---------|------------|------------|----------------------|---------------|-----------|-----------|-----------|
| Ogaplaadi lüüp nr | Elem. | Fa,d kN | Ma,d Nm | Alfa kraad | Beta kraad | Aleg mm <sup>2</sup> | Anêul Aleg mm | L Lnêul L | Nd,max kN | Nd,min kN |
| L13 60x100 31     | 1     | 1.12    | 0.00    | 1.00       | 89.99      | 1711                 | .45 60        | .10       | 1.52      | -11.64    |
| 1                 | 1     | 1.12    | 0.00    | 31.00      | 90.00      | 1780                 | .43 60        | .10       | 18.96     | -7.74     |
| L13 120x150 61    | 1     | 3.62    | -27.70  | 4.64       | 4.64       | 6292                 | .26 120       | .36       | 0.00      | -14.45    |
| 1                 | 1     | 3.62    | 48.63   | 4.64       | 85.36      | 6600                 | .44 120       | .36       | 18.96     | -7.74     |
| L13 144x250 61    | 1     | 5.27    | -149.94 | 58.04      | 1.95       | 7840                 | .37 83        | .66       | 0.00      | -14.45    |
| 62                | 1     | 5.63    | 7.40    | 47.69      | 12.51      | 3724                 | .76 81        | .67       | 10.99     | 0.00      |
| 31                | 1     | 6.58    | -28.51  | 2.68       | 2.68       | 13680                | .21 221       | .36       | 1.52      | -11.64    |
| L13 120x150 62    | 1     | 5.60    | 16.80   | 32.21      | 2.01       | 3169                 | .79 40        | .95       | 10.99     | 0.00      |
| 63                | 1     | 3.06    | 7.66    | 67.77      | .03        | 1870                 | .78 40        | .95       | 0.00      | -6.12     |
| 1                 | 1     | 5.90    | 96.97   | 1.50       | 1.50       | 6300                 | .44 130       | .48       | 18.96     | -7.74     |
| L13 120x300 63    | 1     | 2.12    | -7.01   | 39.54      | 1.75       | 3321                 | .29 40        | .48       | 0.00      | -6.12     |
| 64                | 1     | 2.85    | -3.65   | 81.31      | 6.18       | 2636                 | .64 62        | .63       | 5.36      | 0.00      |
| 65                | 1     | 4.64    | 29.03   | 20.63      | 5.45       | 4820                 | .45 62        | .63       | 0.00      | -11.07    |
| 31                | 1     | 2.32    | -172.35 | 6.05       | 6.05       | 13050                | .11 258       | .12       | 1.52      | -11.64    |
| L13 60x150 31     | 1     | 1.37    | -21.38  | 16.79      | 7.79       | 2813                 | .28 64        | .47       | 1.52      | -11.64    |
| 32                | 1     | 1.42    | 17.59   | 15.78      | 36.78      | 2712                 | .34 64        | .47       | 0.00      | -15.49    |
| L13 120x150 65    | 1     | 4.85    | 3.23    | 16.85      | 2.03       | 2918                 | .73 62        | .73       | 0.00      | -11.07    |
| 66                | 1     | 1.86    | 5.50    | 63.53      | 19.51      | 2196                 | .47 60        | .54       | 2.36      | 0.00      |
| 32                | 1     | 5.48    | 200.75  | 2.74       | 2.74       | 6300                 | .53 132       | .43       | 0.00      | -15.49    |
| L13 120x250 64    | 1     | 2.67    | -12.27  | 44.86      | .26        | 3110                 | .39 40        | .42       | 5.36      | 0.00      |
| 66                | 1     | 1.28    | -8.95   | 58.67      | 24.37      | 2554                 | .30 40        | .60       | 2.36      | 0.00      |
| 67                | 1     | 2.41    | -18.82  | 58.86      | 3.58       | 3061                 | .39 40        | .60       | 0.00      | -6.16     |
| 1                 | 1     | 3.90    | -83.72  | 12.61      | 12.61      | 10800                | .18 218       | .25       | 18.96     | -7.74     |
| L13 96x200 1      | 1     | 9.48    | 7.00    | .96        | .96        | 6617                 | .61 95        | .46       | 18.96     | -7.74     |
| 2                 | 1     | 9.48    | -22.50  | .96        | .96        | 6617                 | .62 95        | .46       | 19.00     | 0.00      |
| L13 96x150 32     | 1     | 3.38    | 8.49    | 9.01       | 9.01       | 4919                 | .32 96        | .42       | 0.00      | -15.49    |
| 33                | 1     | 3.38    | -29.98  | 9.01       | 9.01       | 4919                 | .33 96        | .42       | 0.00      | -19.41    |
| L13 120x150 67    | 1     | 2.53    | -21.78  | 52.64      | 2.64       | 3334                 | .37 40        | .57       | 0.00      | -6.16     |
| 68                | 1     | 1.32    | 0.00    | 30.00      | 84.70      | 1805                 | .43 40        | .57       | 9.0       | 0.00      |
| 33                | 1     | 2.30    | 58.97   | 27.47      | 27.47      | 6300                 | .22 145       | .20       | 0.00      | -19.41    |
| L13 120x150 68    | 1     | 1.12    | 0.00    | 30.00      | 84.70      | 2511                 | .31 57        | .07       | 9.0       | 0.00      |
| 69                | 1     | 1.12    | 0.00    | 30.00      | 84.70      | 2511                 | .31 57        | .07       | 8.3       | 0.00      |
| 2                 | 1     | 1.12    | 0.00    | 90.00      | 90.00      | 6300                 | .12 115       | .06       | 19.00     | 0.00      |



