Declaration of performanceDeclaration of Performance,<br/>DoP 204/2013According to Construction Products Regulation (EU) 305/2011<br/>No. MK-130047DoP 204/2013<br/>haubold ringet tromlesøm,<br/>Rustfri

| 1.      | Unique code:                                     | Threaded nail  |
|---------|--|--|
| 2.      | Means of identification:                         | 582-12/2,1 V4A ring<br>(DH, Domed Head, ring, V4A)   |
| 3.      | Intended use:                                    | dowel-type fasteners for use in load bearing timber structures   |
| 4.      | Manufacturer:                                    | Raimund Beck Nageltechnik Ges.m.b.H<br>Raimund Beck Str. 1<br>A-5270 Mauerkirchen  |
| 5.      | Authorized representative, if any:               | not applicable   |
| 6.      | System of constancy of performance:              | system 3   |
| 7.      | Purpose harmonized standards :                   | The testing institute for wood and dry construction –<br>1503 carried out an evaluation and testing of the constancy<br>of performance according to system 3. On the basis of type<br>testing (based on the sample drawn by the manufacturer),<br>type calculation, tabulated values or descriptive<br>documentation of the product, the product type could be<br>determined and an inspection report with regard to the<br>essential characteristics of the building product was issued |
| 8. Decl | laration of performance at an ETA <sup>1</sup> : | not applicable   |

## 9. Declared performance

| Essential characteristics                  | Performance                         | Harmonized technical specification |
|--|-------------------------------------|------------------------------------|
| Characteristic withdrawal parameter        | $f_{ax,k} = 7,28 \text{ N/mm}^2$    | DIN EN 14592:2009-02               |
| Characteristic head pull-through parameter | $f_{head,k} = 12,96 \text{ N/mm}^2$ | DIN EN 14592:2009-02               |
| Characteristic yield moment                | My,k = 1050 Nmm                     | DIN EN 14592:2009-02               |
| Characteristic tensile capacity            | NPD                                 | DIN EN 14592:2009-02               |
| Longevity (corrosion protection)           | Service class 3                     | DIN EN 14592:2009-02               |

10. The performance of the product identified in point 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Christian Beck - General Manager and CCO

Sect Q.

(Signature)

Mauerkirchen, June 20th 2014

<sup>1</sup> European Technical Approval

## Declaration of Performance, DoP 204/2013 haubold ringet tromlesøm, Rustfri

|               |              |             |                              |                         |                      | Declared values according to EN 14592:2008 + A1:2012 |   |                               |                  |                     |
|---------------|--------------|-------------|------------------------------|-------------------------|----------------------|--|---|-------------------------------|------------------|---------------------|
| Nail diameter | Shankprofile | Nail length | Head diameter /<br>Head area | Length of<br>nail point | Corrosion protection | Service<br>class                                     | Characteristic values fu,k min. 600 N/mm2 |                               |                  |                     |
| [mm]          |              | [mm]        | [mm/mm2]                     | [mm]                    |                      |  | Withdrawal<br>parameter                   | Head pullthrough<br>parameter | Yield moment     | Tensile capacity    |
|               |              |             |                              |                         |                      |  |   | f <sub>head,k</sub>           | M <sub>y,k</sub> | f <sub>tens,k</sub> |
|               |              |             |                              |                         |                      |  | [N/mm <sup>2</sup> ]                      | [N/mm <sup>2</sup> ]          | [Nmm]            | [kN]                |

| 2,1 Ring 25-50 | 4,7/17 4,2 | A4 | 1-3 | 7,28 | 12,96 | 1050 | NDP |
|----------------|------------|----|-----|------|-------|------|-----|
|----------------|------------|----|-----|------|-------|------|-----|