

Graphic 21 shows that the damage to the asphalt pavement increases in proportion to the wheel loading. The carbon-fibre grid reduces the stress peaks caused by wheel loads acting on the bituminous pavement layer. The destruction of the layer is thus reduced significantly. This is demonstrated by higher durability, prolonged replacement cycles as well as reduced maintenance. Thanks to reduced traffic congestion there are additional economic benefits. Taking all aspects into account the cost advantages delivered by reinforced asphalt pavement layers are relevant.

### **13. Reference literature**

- Different Test reports EMPA, Dübendorf, Switzerland
- Inquiry report by Netherlands Pavement Consultants bv, NPC Nr. 018463
- Test report by Centre de recherches routières Bruxelles Belgique, EP 61530
- Test report by Consultest, Ostringen Switzerland, 1119-02
- Test report by SACR, autumn 2003
- Modelling by Dr. Andrew Faeh, Ingenieurbureau Heierli AG, Zürich, Switzerland