



TenCate Grass guarantee conditions and guidelines

On the following pages you will find our updated, limited warranty. Please note that this warranty is only valid after returning a signed copy.

1. TenCate Grass limited warranty

1. Limited warranty. Subject to the terms, conditions and limitations contained in this warranty certificate, the TenCate Grass Group doing business as TenCate Grass Europe, TenCate Grass Middle East, TenCate Grass North America, TenCate Grass Asia, warrants to the person, firm or entity purchasing from TenCate Grass as indicated on the signature page hereof ("Purchaser") that under normal conditions during the applicable warranty period referred to below, the TenCate Grass products will maintain their UV-stability and tensile strength. For purposes of this warranty, a product will be deemed to have maintained its UV-stability and tensile strength if the original tensile strength of the product does not decrease by more than fifty percent. The warranty period varies by product and geographical location of the synthetic turf installation site. A table containing the warranty periods for the products is set forth on Exhibit A to this warranty certificate. The applicable warranty period begins on the earlier of (i) the date of installation of the synthetic turf containing the product or (ii) the date that is one year after the date of TenCate Grass' invoice for the product.

2. Remedy. If a product fails to perform as warranted during the warranty period, TenCate Grass will provide replacement product, F.O.B. TenCate Grass' plant, for the product determined by TenCate Grass not to comply with the above warranty, allowing the purchase price for the replacement product multiplied by a fraction, the numerator of which is the number of months remaining in the unexpired portion of warranty period and the denominator of which is the total number of months in the warranty period. Purchaser shall be responsible for paying the portion of the purchase price for the replacement product not allowed by TenCate Grass. TenCate Grass shall not be responsible for removal or disposal of the defective turf or manufacture or installation of new turf.

3. Limitations on coverage. This warranty does not apply (i) if the product is used for any application other than sports fields or courts or landscape applications, (ii) to any damage caused during or on account of improper processing, installation or repairs, or (iii) to the extent that any defect or damage is caused by:

- (a) Burns, cuts, accidents, vandalism, abuse, negligence or neglect;
- (b) Improper design or failure of the sub-base of the sports field or court;
- (c) Wear or abrasion caused by an inadequate sub-base;
- (d) Use of infill products of an incorrect grade (according to FIFA accredited test institutes, such as ISA-Sport/ Labosport, or other test institutes accredited by TenCate Grass);
- (e) Failure to maintain infill products at the correct level (according to FIFA accredited test institutes, such as ISA-Sport/ Labosport, or other test institutes accredited by TenCate Grass);
- (f) Use of inappropriate footwear or sports equipment;

- (g) The playing surface being used other than for the purpose for which it was designed and installed;
- (h) Use of cleaning chemicals, herbicides or pesticides;
- (i) Use of improper cleaning methods;
- (j) Any harmful chemical reaction to the product caused by infill materials;
- (k) Acts of God or other conditions beyond the reasonable control of TenCate Grass;
- (l) Improper processing of the product (e.g., tufting, coating, texturizing or twisting);
- (m) Post fibrillation after or during installation for purposes other than to get the infill materials in place; or
- (n) Failure to properly maintain, protect or repair the products or the turf.

All synthetic turf containing the products is subject to normal wear and tear. Normal wear and tear is not a manufacturing defect and is not covered by this warranty. In addition to the factors mentioned above, wear and tear depends on, without limitation, the construction of the synthetic turf (fiber face weight, stitch rate, fiber pile height and gauge) and the intensity of use of the synthetic turf. TenCate Grass shall not be responsible for any warranty issued or made by Purchaser to third parties, including, without limitation, any warranty made by Purchaser with respect to the useful life of the synthetic turf containing the products. Purchaser should carefully read the latest versions of TenCate Grass' product information materials and literature for information about optimizing the performance of the synthetic turf containing the products.

4. Limitation of liability. IN NO EVENT SHALL TENCATE GRASS BE LIABLE, WHETHER IN CONTRACT OR IN TORT (INCLUDING NEGLIGENCE) OR UNDER ANY OTHER LEGAL THEORY (INCLUDING STRICT LIABILITY), FOR LOST PROFITS OR REVENUES, LOSS OF USE OR SIMILAR ECONOMIC LOSS, OR FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SIMILAR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE, CONDITION, POSSESSION, PERFORMANCE, MAINTENANCE, NON-DELIVERY OR LATE DELIVERY OF THE PRODUCTS, EVEN IF TENCATE GRASS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

5. No other warranties. THE WARRANTY PROVIDED HEREIN IS THE SOLE AND EXCLUSIVE WARRANTY WITH RESPECT TO TENCATE GRASS' PRODUCTS AND SUPERSEDES ANY AND ALL OTHER WARRANTIES, ORAL OR WRITTEN, OF ANY TYPE RELATING TO TENCATE GRASS' PRODUCTS. ANY PRODUCTS OF TENCATE GRASS NOT COVERED BY THIS WARRANTY ARE SOLD "AS IS." THE REMEDY OF REPLACEMENT SET FORTH IN SECTION 2 IS THE SOLE OBLIGATION OF TENCATE GRASS, AND THE SOLE REMEDY OF PURCHASER, UNDER THE WARRANTY PROVIDED HEREIN. EXCEPT AS PROVIDED HEREIN, TENCATE GRASS MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, NATURE OR DESCRIPTION WITH RESPECT TO ANY OF ITS PRODUCTS, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS OF ANY OF THE PRODUCTS FOR ANY PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY RIGHTS, AND TENCATE GRASS HEREBY DISCLAIMS THE SAME.

6. Notification of claims. Claims under this warranty must be submitted in writing, together with proof of turf production and installation date, name of installation company, batch and lot number, location of installation, product sample/fiber material, sample of infill material(s) and a minimum of three clear pictures showing the problem to:

TenCate Grass North America
1131 Broadway Street
Dayton, TN 37321-1802

TenCate Grass shall not be responsible for any costs or expenses incurred by Purchaser or others with respect to any tests, inspections or consultations conducted by Purchaser or others. Claims must be submitted within 30 days after discovery of the alleged defect. Purchaser must promptly inspect all Products upon delivery. Anything herein to the contrary notwithstanding, to the extent that any defects, shortages or non-conformities in the products are discoverable by inspection upon delivery of the products, all obligations of TenCate Grass to Purchaser with respect to such defects, shortages and non-conformities shall be deemed to be satisfied, and all products shall be deemed to be free of such defects, shortages and non-conformities, unless Purchaser notifies TenCate Grass of such defects, shortages or non-conformities in writing within 30 days after the date of delivery.

7. Modifications. This warranty, together with TenCate Grass' 'General terms of delivery and payment', is the complete, final and exclusive agreement of the parties with respect to the quality and performance of the products and any and all representations and warranties concerning the products. No dealer, sales representative or similar person has the authority to make any representations or warranties with respect to the products, to extend any warranty period hereunder or otherwise to change, modify, amend or supplement the provisions of this warranty. None of the provisions of this warranty may be changed, modified, amended or supplemented except by a written instrument signed by an authorized representative of TenCate Grass. This warranty applies to all TenCate Grass products sold to Purchaser beginning on the date this warranty certificate is issued to Purchaser and continuing until TenCate Grass issues Purchaser a new warranty certificate signed by an authorized representative of TenCate Grass that expressly supersedes this warranty certificate in whole or in part. Any such new warranty certificate will be effective upon receipt by Purchaser. Purchaser's purchase of any TenCate Grass products following receipt of any new warranty certificate from TenCate Grass will constitute Purchaser's acceptance of the terms and conditions of such new warranty certificate.

8. Waiver. No failure on the part of TenCate Grass to exercise, and no delay by TenCate Grass in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or remedy by TenCate Grass preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

9. Governing law. This warranty and the rights and obligations of the parties under this warranty shall be governed by Dutch laws, without regard to its conflicts of laws principles. Sales of products by TenCate Grass to Purchaser shall not be subject to the United Nations Convention on the International Sale of Goods.

10. Severability. If any provision or portion of any provision of this warranty shall be held to be illegal, invalid or unenforceable by a court of competent jurisdiction, the remaining provisions or portions thereof shall constitute the parties' agreement with respect to the subject matter hereof, and all such remaining provisions or portions thereof shall remain in full force and effect.

11. Assignment. Purchaser may not transfer, convey or otherwise assign all or any of its rights under this warranty without the prior written consent of TenCate Grass. Any such transfer or assignment by Purchaser without TenCate Grass's prior written consent shall be null and void and of no force or effect. This warranty shall inure to the benefit of and be binding upon TenCate Grass and Purchaser and their respective successors and permitted assigns. Claims under this warranty may only be made by Purchaser and not by Purchaser's customers or any other third parties.

1.2. Exhibit A to TenCate Grass limited warranty

Exhibit A describes the warranty on UV-stability and tensile strength. For purposes of this warranty, a product will be deemed to have maintained its UV-stability and tensile strength if the original tensile strength of the product does not decrease by more than fifty percent.

Solar activity in W/m ²	TenCate Tapeslide™ PP Thickness < 60µm	TenCate Tapeslide™ PP Thickness > 60µm	TenCate Tapeslide™ ES	TenCate Tapeslide™ LSR®	TenCate Tapeslide™ XP™
100 – 160	6 years	8 years	8 years	9 years	12 years
161 – 200	5 years	7 years	7 years	8 years	11 years
201 – 240	4 years	6 years	6 years	7 years	10 years
241 and >	2 years	5 years	5 years	6 years	9 years

Solar activity in W/m ²	TenCate Monoslide™ Classic TenCate Monoslide™ Pro	TenCate Monoslide™ XQ™	TenCate Oasis™
100 – 160	10 years	11 years	9 years
161 – 200	8 years	10 years	8 years
201 – 240	7 years	9 years	7 years
241 and >	6 years	8 years	6 years

Solar activity of the turf installation site in W/m² is determined according to the climatic map of the world published by the KNMI, a copy of which is included in paragraph 1.3. **Please be aware that TenCate Grass does not warrant wear and tear caused by any use of pitches incorporating TenCate fibers.**

Everywhere, where 'TenCate Grass' is written in this warranty, this can be substituted for 'TenCate Grass Europe', 'TenCate Grass Middle East', 'TenCate Grass North America' and 'TenCate Grass Asia' where applicable.

Please sign this page in the space provided below and fax a copy to TenCate Grass Europe.

ACCEPTED AND AGREED TO BY:

Company name: _____

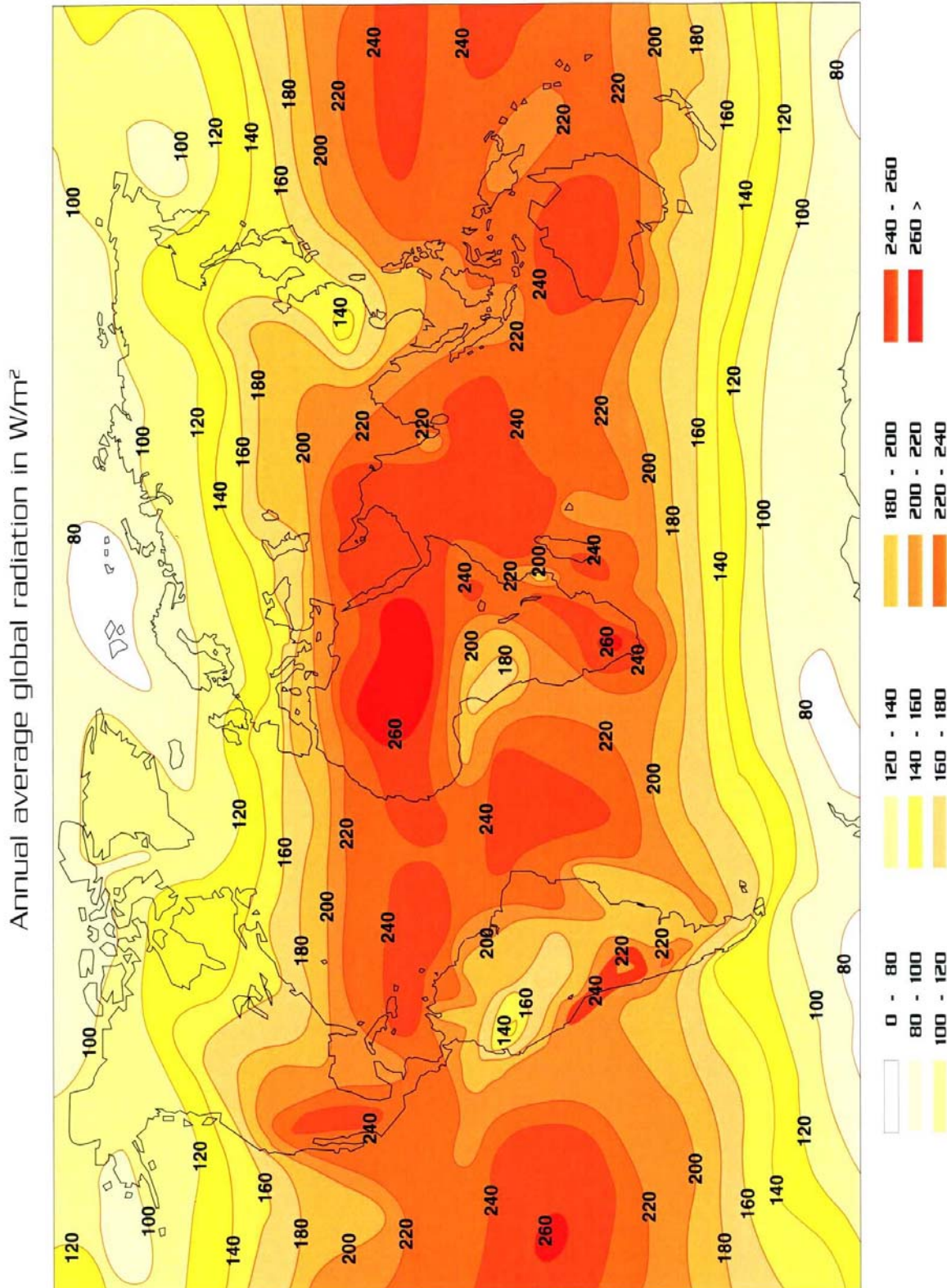
Purchaser name: _____

Title: _____

Date: _____

Purchaser signature: _____

1.3. Annual average global radiation in W/m²



2. Guidelines for normal use of artificial turf incorporating TenCate Grass fibers

2.1. Wear and tear and life expectancy

Like all products, TenCate fibers are subject to wear and tear. The life expectancy of artificial grass fibers is dependent on the intensity of use of artificial turf, as well as on local climatic conditions. The more a field is being used, the quicker its lifetime will pass. The intensity of use is a combination of several factors including the usage in hours per day, the number of people that sport or play (simultaneously) on the pitch, the type of sport or play and the type of footwear that is used.

Other factors determining the life expectancy of TenCate Grass fibers are:

- Type of fiber (polymer type, thickness)
- Density of the artificial grass carpet (number of tufts or weight per square meter in reality)
- Quality of manufacturing of the artificial grass carpet
- Chosen sand and/or rubber grade
- Level of the sand and/or rubber infill (and thus the free pile height of the fibers)
- Quality of installation
- Quality of infrastructure
- Maintenance of the pitch, including the use of chemicals (detergents)

2.2. Rubber-infill pitches

Since the introduction of rubber-infill pitches, TenCate Grass has been monitoring the use and wear of these pitches. In addition, extensive research has been done on the effects of the above-mentioned factors on the wear and tear of rubber-infill pitches. The following guidelines are the results from this experience and research:

Type of fiber

For rubber-infill pitches, TenCate Grass strongly advises to use PE based fibers, for example TenCate Tapeslide™ XT, with a thickness of at least 100 microns. The use of PP fibers or PE fibers with a lower thickness has a negative effect on the life expectancy of a rubber-infill football pitch. The reasons for this are the following:

- PP fibers are unsuitable for rubber-infill pitches, due to their inferior wear properties in high-pile systems
- PP fibers lack sliding friendliness
- Thicker fibers are better resistant to wear and tear and are more UV resistant

Tuft settings

A minimum of 8400 tufts per m² should be used.

Total pile height

The pile height should be between 35 and 75 mm (between 1 3/8 and 3 inches).

Infill height and free pile height

For the best performance of a rubber-infill pitch, a free pile (the height of the fibers above the infill) to a maximum of 15 mm (5/8 inch) is required. This in order to prevent the players from playing on the sides of the fibers, in stead of on the fiber tips.

If the free pile height exceeds 15 mm (5/8 inch), the artificial grass fibers will be exposed to heavier use that will accelerate the wear of the artificial grass field drastically.

Footwear

Appropriate footwear should be used. This means that the players should wear studded sole shoes or shoes with so-called 'blades'.

Using shoes with flat soles or other inappropriate footwear will accelerate the wear of the artificial grass field drastically.

Field size

Full-size fields should have a minimum size of 5,500 square meters (60,000 square feet).

Downsizing an artificial grass field to for example 600 square meters (6,500 square feet), quite common for 5-a-side or 7-a-side soccer fields, will accelerate the wear of the artificial grass field drastically (depending on the available field size per player).

Field size per player

Each player should have at least 125 square meters (1,350 square feet) available. This measurement is easily calculated by dividing the effective playing area by the number of players.

Decreasing the available field size per player, e.g. during training exercises, or by increasing the number of people using the field simultaneously, will accelerate the wear of the artificial grass field drastically.

Intensity of use

30 hours per week are to be considered as normal use (based upon a field size per player of at least 125 square meters (1,350 square feet)).

Increasing the intensity of use will accelerate the wear of the artificial grass field drastically.

Please be aware that TenCate Grass only warrants UV-stability and tensile strength, not wear and tear!

2.3. Influences of rubber infill materials on artificial grass fibers

A number of aspects of rubber infill materials can negatively influence the quality of artificial turf:

- Wear and powdering of the infill;
- Morphology of the infill;
- Particle size distribution of the infill.

Based on these aspects, following guidelines have been set for rubber infill materials:

- The wear may not be higher than 250 mm³ (according to ISO 4649) to prevent powdering of the rubber and compaction;
- The roundness of 10 random rubber particles should at least be 0.70;
- The particle size should lie between 0.25 and 3.0 mm.

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