#### KEIDEL DrainStar GmbH

# Terms and Conditions for the Sale of Software

# Description of the Software - Drainstar Siphonic Calculator versions DSC-999

- § 1 Basis and Subject matter of the Agreement
- 1. The contractual relations between the company Keidel DrainStar GmbH in Wesertal, Germany (hereinafter called Keidel DrainStar GmbH) and Buyer shall be exclusively based upon the provisions set forth below.
- 2. Keidel DrainStar GmbH serves and supplies only commercial Buyers.
- 3. The SOFTWARE is a working tool for the planning of a multitude of construction projects and is not software drawn up individually for a particular construction project.

This contract shall come into effect with the sending of the e-mail to the buyer with the download link and the serial number.

- 4. Any conditions of purchase employed by Buyer shall not have any legal effect in relation to this Contract, also and to the extent that no explicit objection is raised against them. Any supplementary agreements as well as any changes to this Contract, including changes to the agreement that written form is required, have to be made in writing.
- 5. On the basis of this contract the buyer receives a computer programme hereinafter called SOFTWARE in accordance with the respective software description.
- 6. Against payment of the remuneration agreed below, the Buyer shall be granted beneficial interest in accordance with § 5 pertaining to the SOFTWARE acquired by him.
- 7. Keidel DrainStar GmbH expressly reserves the right to implement changes in terms of realisation and design and to implement technical improvements.
- § 2 Goods and services supplied by Keidel DrainStar GmbH

After receipt of the payment, the buyer receives an email with the download link and the serial number. With the help of the download link he will download the SOFTWARE from the Internet himself.

§ 3 Delivery, Passing of Risk and Delivery Deadlines

The download of the SOFTWARE from the internet shall be at Buyer's own cost and risk. Transmission of the download link and the the serial number shall be performed within two workdays after payment was received. This deadline shall be extended, if Keidel DrainStar GmbH is prevented from fulfilling this deadline due to unforeseen circumstances which, despite reasonable care, could not be staved off. This shall in particular apply in case of labour disputes, disturbances in their own course of operations, disturbances in the course of operations of third parties including network provider, and disturbances due to measures taken by public authorities. SOFTWARE may not be returned.

#### § 4 Remuneration

- 1. For the supply of the SOFTWARE as described in § 1, Buyer shall, by payment in advance, owe the price stipulated in the applicable price list.
- 2. The costs of any monetary transactions shall be borne by Buyer.
- 3. The remuneration shall be exclusive of turnover tax due as well as any other taxes and charges.

### § 5 Licence

- 1. Upon complete payment, the buyer shall be granted a license to use the delivered SOFTWARE one (1) computer of his choice only. If the SOFTWARE is used on more computers, additional licenses must be acquired for each additional use.
- 2. No further rights pertaining to the SOFTWARE beyond those stated above are transferred to the Buyer. In particular, any translation, adaptation, alteration, processing, provision of access to the general public or use of the SOFTWARE for any other purposes shall be prohibited. Excluded from this is its adaptation in such a way that new items/parts are worked into the SOFTWARE by Buyer.

#### § 6 Warranty

1. The warranty period is 12 months.

Keidel DrainStar GmbH warrants that the SOFTWARE fulfils the characteristics as shown in the functional specifications of this contract and that it complies with the state of the art.

Parties agree that the operation of the SOFTWARE requires relevant technical expertise in the area of siphonic roof drainage. Additional characteristics shall only present a contractually due condition, if and to the extent that they were explicitly confirmed by Keidel DrainStar GmbH. Any conditions resulting from presentations provided to Buyer shall explicitly be regarded as not due under the contract, unless they can be found in the functional specifications mentioned above. Suitability of the SOFTWARE for a certain purpose of use, especially a certain project planning task, is not owed. In this respect, reference to application examples does not represent any warranty of the contractually owed condition. The SOFTWARE uses German and European standards, regulations and directives ("Rules"). The user, whether Buyer or Buyer's customer or a third party, shall be responsible to examine, before use or provision of the SOFTWARE to another, whether use of the SOFTWARE outside of the area of application of the Rules is permitted or appropriate, Keidel DrainStar GmbH extends no warranty, whether expressly or implied, that use of the SOFTWARE outside of the area of application of the Rules, is covered, permitted or appropriate. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS PARAGRAPH 6.1.

- 2. In case of defects, Buyer shall be entitled to rectification of defects, i.e. delivery of a SOFTWARE version which is free from defects. Any other rights concerning the removal of defects, e.g. the right to rescind the contract or the right to reduce the price, shall be excluded. Defects shall only be considered as vital contract violations in the sense of the CISG, when they exclude usability of the SOFTWARE to an essential degree.
- 3. Buyer has the obligation to notify defects immediately upon their discovery. Such notification of defects has to be provided with a detailed description of the defects. Buyer shall provide the company Keidel DrainStar GmbH with any and all information required for the assessment of the asserted defect. If he fails to do so despite having been requested by Keidel DrainStar GmbH once, he shall lose his claims based on the warranty for defects.
- 4. Any warranty shall become void, and all liability connected thereto is disclaimed to the extent permitted, if Buyer modifies the Software and or the implemented Data approvided to him. In addition, a warranty becomes void, and all liability connected thereto is disclaimed to the extent

permitted, where the Software is used on a project or in a manner in which there are errors in its use, such as incorrect conections made, or where the Rules made applicable for the Software (see Paragrahp 8.1 supra) are not followed.

### § 7 Liability

- 1. To the extent permitted by the substantive law applicable at Buyer's principal place of business, Keidel DrainStar GmbH shall not be liable for damages including but not limited to lost income, lost profit, delay damages, punitive damages, consequential damages, or foreseeable or unforeseeable damages, under any cause of action, whether grounded in contract or tort. Keidel DrainStar GmbH shall further not be liable to Buyer for damages arising out of any injury or death to a person, To the extent that liability exists notwithstanding the previous sentence, it shall be limited to the benefits from the liability insurance of Keidel DrainStar GmbH. For details regarding this matter, see the document "Liability Insurance Confirmation of Insurance" from our insurer, which we will provide on request. Insofar as the law possibly applicable according to the provisions of international private law in addition to the law chosen does not permit such limitation of liability, the parties already at this point agree upon a limitation of liability to the extent which would be permitted by the applicable law. Possible voidness of the limitation of liability above shall only make the latter fall away to the extent to which it concerns the inadmissible provision; apart from this, the limitation of liability shall be maintained.
- 2. In case of default, Keidel DrainStar GmbH shall be liable to the maximum amount of 0.5% of order value per week, but to a maximum of 10% of order value in total. Further, any compensation claims shall be limited to compensation for additional costs possibly incurred, excluding any possible loss of profits.
- 3. Buyer shall indemnify Keidel DrainStar GmbH in the event that Keidel DrainStar GmbH is sued, threatened to be sued, or held liable on any matter arising out of Buyer's use or provision of the SOFTWARE. This indemnification covers the costs of any such resulting proceeding including attorneys' fees as well as the amount of any settlement or judgment. Keidel DrainStar GmbH retains the right to select local counsel in such event for Buyer or to appear in such action with its own counsel. Keidel DrainStar GmbH shall have the right to direct how claims or proceedings are to be handled that are covered by this indemnification.

#### § 8 Design Protection

The Buyer is not permitted to imitate or incite to imitate the SOFTWARE provided to him and to market any imitation; this shall also apply insofar as the applicable copyright does not provide for such a regulation in any case. In the event of a breach of the agreement above, the Buyer shall be subject to a penalty for non-compliance to the amount of 100% of the licence fee or remuneration, respectively. Any possible statutory damage claims shall remain unaffected by this; the penalty shall not be taken into account as part payment for any such damage claims.

- § 9 Place of Performance, Court of Jurisdiction, Choice of Law
- 1. Place of Performance for all deliveries and services performed under this Agreement shall be the registered office of Keidel DrainStar GmbH.
- 2. The agreed court of jurisdiction shall be the one in charge of the registered office of Keidel DrainStar GmbH, while Keidel DrainStar GmbH shall also be entitled to institute legal proceedings against the Buyer at the court in charge of the registered office of Buyer.
- 3. German law shall apply; insofar as this Contract does not provide for a final regulation, the law of the contract of sale shall apply. In case of trans-national legal relations, UN Sales Law (CISG), and in addition to the CISG, German law shall apply.
- 4. If one or more of these provisions become ineffective, the remaining provisions shall remain valid. In this case, the parties are obliged to replace the ineffective provision with an effective provision that approximates the economic purpose of the ineffective provision as closely as possible.

# \*\*\*END Terms and Conditions for the Sale of Software

Description of the Software - Drainstar Siphonic Calculator versions DSC-999 (herein called SOFTWARE)

#### 1. User model

Professional knowledge in the field of siphonic roof drainage to the usual extent as well as familiarity with the Windows® operating system are assumed. Online help and the manual are not text books or teaching curricula. For training purposes, upon request, other suitable resources are available. 'VDI 3806 Roof drainage with siphonic system' is part of the contract.

#### 2) Basic equipment

A personal computer for the local operating. As operating system for the computer program, Windows 10 are assumed. The program code is generated with the Visual Basic .NET development system. For master data, the database system Microsoft ACCESS is used.

# 3. Hardware prerequisites

Intel® Pentium-compatible processor

Microsoft® Windows 10

2048 MB RAM

25 MB of available hard disk space

CD-ROM drive (for installation if software is delivered as CD)

Internet Connection (for download installation package and online activation)

VGA graphics card, VGA monitor, min. Resolution 1280 x 800

Windows-compatible printer

A mouse is recommended

## 4. User equipment

The SOFTWARE has a graphic user interface (GUI). For inputs by the user, dialog with input fields are made available. At the end of the dialogue the SOFTWARE awaits the next subsequent action. As a rule, the user can freely decide on the sequence of his working steps (non-modal window). Modal dialogues are used sparingly, e.g. when operations have been completed and in case of related questions. When entry in specific mandatory fields is demanded, modal dialogues are likewise used. (A modal window blocks the other windows or even the entire system).

# 5. Tasks and objectives

The SOFTWARE supports generation, calculation and documentation of roof drainage systems with siphoning in analogy with the VDI guidelines 3806 Roof Drainage with Siphonic Systems. The calculation results, overview drawing, parts lists may be seen by the user on the screen and

outputted on A4 paper with the printer. As an alternative to printing out, saving as a PDF file is also possible. The one-sided overview drawing can also be saved as a EMF file.

#### 6. Presetting

Unless otherwise contractually agreed, the SOFTWARE comes delivered with the standard defaults common in Germany. As sample data, at Keidel DrainStar GmbHs option, conventional commercial pipes, fittings, roof runoffs, joints can be used. Standard languages for the SOFTWARE is English.

#### 7. Buyer adaptations

The SOFTWARE can be adapted by the user: Pipe series, siphonic roof outlet, rain events adapted to local conditions. More details are explained in a separate description.

#### 8. Calculation method

For each calculation the user must check,

- a) whether the dimensions and the values for the negative pressure from the pipe system in the Keidel DrainStar GmbH software correspond to the specifications of the respective pipe manufacturer.
- b) whether the dimensions and performance data for the siphonic roof outlets in the Keidel DrainStar GmbH software correspond to the specifications of the respective roof outlet manufacturer.

More details are explained in a separate description.

Three calculation methods are used for dimensioning the Siphonic drainage system: Dimensioning of the downpipe: Pre-dimensioning-Simulation calculation.

#### 9. Dimensioning of the downpipe

The first step is to have the user check start-up conditions and where needed to determine the maximum nominal width of the downpipe.

#### 10. Pre-dimensioning (Simple calculation)

Upon pre-dimensioning (also referred to as normative value calculation) the SOFTWARE calculates the drainage elements and compares their syphon losses in each flow path with the available pressure. The user must keep correcting dimensioning until the deviation A in each flow path lies in the range of +/ 100 mbar. Only when the target has been reached does the second calculation method (simulation calculation) come to be applied.

# 11. Simulation calculation (Iterative calculation)

In simulation calculation, the volume flows of the individual flow paths are modified in an iterative calculation operation as long as necessary until the differences between available pressure and pressure losses in each flow path cancel each other out. When this objective is achieved, the user then proceeds to check minimum flow speed in the pipes of the drainage system, maximum flow speed at the transition to the free channel system, control of static pressure and drain-off capacity of all roof runoffs in one roof area or segment. In case of failure to achieve the objectives stated above, the user must undertake repeated correction of pipe dimensioning as described in the sections on pre-dimensioning and dimensioning of the downpipes. When all requirements have been met, the user may undertake measurement of the emergency overflows, print out the calculations and the overview drawing, generate the parts lists and the tendering texts.

### 12. Measurement of emergency overflows

The SOFTWARE possesses a function for measuring a quadrangular safety overflow in an attic.

### 13. Parts lists

For measurement of the drainage pipework, the SOFTWARE uses the inside diameter. The following rules are basis for the generation of the parts list. When implementing the rules approximation, formulas are inserted into the parts list generator which calculates the quantities with sufficient precision. With the Excel interface the user can export the parts lists.

## 14. Rules for Pipework Components

Branch: only 45 ° Y-branch. Dimension changes in the area of the branches: 1st reducer, 2nd branch in flowing direction.Bend: only bends 45°, 90°. Right-angled direction changes are possible. Dimension changes in the area of the direction changes: 1st bend, 2nd reducer in flowing direction.The diameter of the pipe connection of the roof outlet has to be a part of the respective pipe range. Roof outlets shall have a vertical connecting pipe. The parts list shows the pipes, one-piece fittings, siphonic roof outlets in the dimensions of the calculation. Expansion and shrinkage material, Connection material and fastening material is not taken into account in this software versions.

IMPORTANT: The fastening of pipework to the building structure must be carefully planned and executed by experts in this field.

The expansion and shrinkage of the pipework must be taken into account. Safety clamps for the pipework must be considered during planning and installation according to the installation instructions of the manufacturer. Otherwise the roof drainage system may fail, resulting in the loss of the entire building.

#### 15. The Manual

contains functional descriptions of the software, notes and a glossary.

# 16. Licence Management

Each PC requires a licence. This type of licence is also called Licence per Seat.

#### 17. Test procedure

For testing the SOFTWARE the reference project will be used. The reference project approximates to the Sample Calculation (Annex B) and the Determination of pipe diameter and calculation of pressure loss (Annex C) of VDI 3806. In doing so, the effective type of pipe and pipe series have to be considered.

###END Functional Specifications DrainStar Siphonic Calculator