



EN | VERSION 1.0 | 06/16/2021



**USER'S MANUAL**  
**K&F** SPECTRA 212i Ceiling Bracket



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## 1 Introduction

### 1.1 Icons Used



This icon indicates a risk of injury or death. Not following these instructions may result in serious health problems including potentially fatal injuries.



This icon indicates a possibly dangerous situation. Not following these instructions may cause minor injuries or damage.



NOTICE

This icon marks instructions for proper use of the described products. Not following these instructions may cause malfunctions or damage.



This icon marks information provided for simplified use of the described products.

### 1.2 About this user's manual

EN | Translation of the original instructions

All KLING & FREITAG manuals are originally authored in German.

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All specifications regarding the features of the described products and applicable safety guidelines provided in this manual are based on information available at the time of publishing.

We assume no responsibility for technical specifications, dimensions, weights, and properties.

All information in this manual is subject to change without notice.

**To ensure safe operation, all persons using the speaker system must have access to these user's manual and all other relevant material during installation. The speaker system may neither be set up nor used until these user's manual has been read, understood and kept readily available in site.**

KLING & FREITAG spare manuals are separately available for order or can be downloaded from our website: [www.kling-freitag.de](http://www.kling-freitag.de)

Contact Us: [info@kling-freitag.de](mailto:info@kling-freitag.de)

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## 2 Product Description

The ceiling bracket allows for suspending single speakers vertically from a ceiling. It allows for continuous speaker down-tilt.

### 2.1 Intended Use

This ceiling bracket is designed exclusively for suspended installation of a K&F SPECTRA 212i speaker. No other use is permitted.

#### WARNING

#### **Risks imposed by falling or overturning parts**

Standing use, for example, on a stand, is not permitted.

Vertical suspension only.

Also, be sure to use accessories to the SPECTRA 212i speaker system for stationary indoor installations only. The system is not designed for repeated assembly, reconfiguration, disassembly, or transport.

Any use not described in this User's Guide is not an intended use.

Unauthorized changes to the product are not permitted.

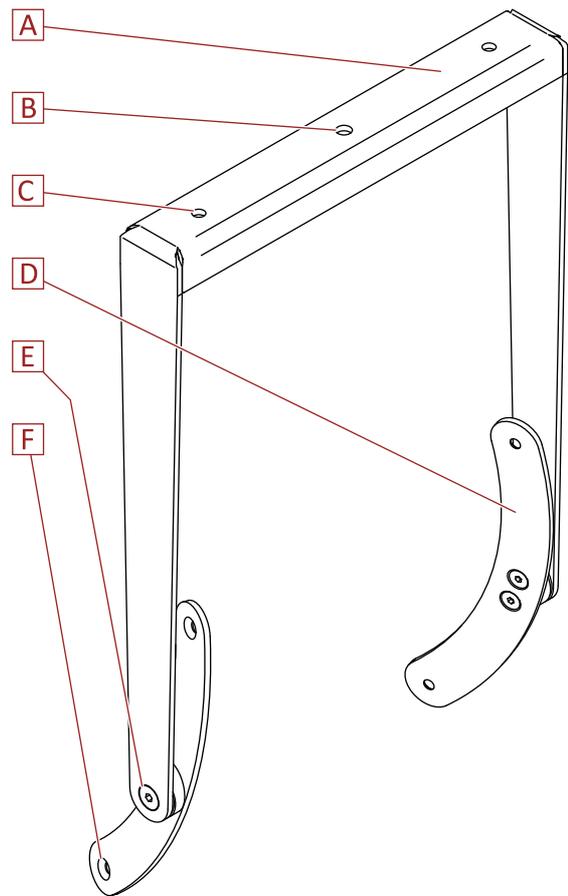
### 2.2 Items Included

- 1 ceiling bracket
- 1 instruction manual

(The screws required for mounting the accessories to the speaker are supplied with the speaker.)

### 2.3 Overview of Ceiling-Bracket Components

- [A]** Ceiling Bracket
- [B]** D12.5mm hole
- [C]** 2 x D10.5mm hole
- [D]** 2 x arcuate mounting plate
- [E]** 2 x fixing screw
- [F]** 4 x hole for mounting accessories to the speaker

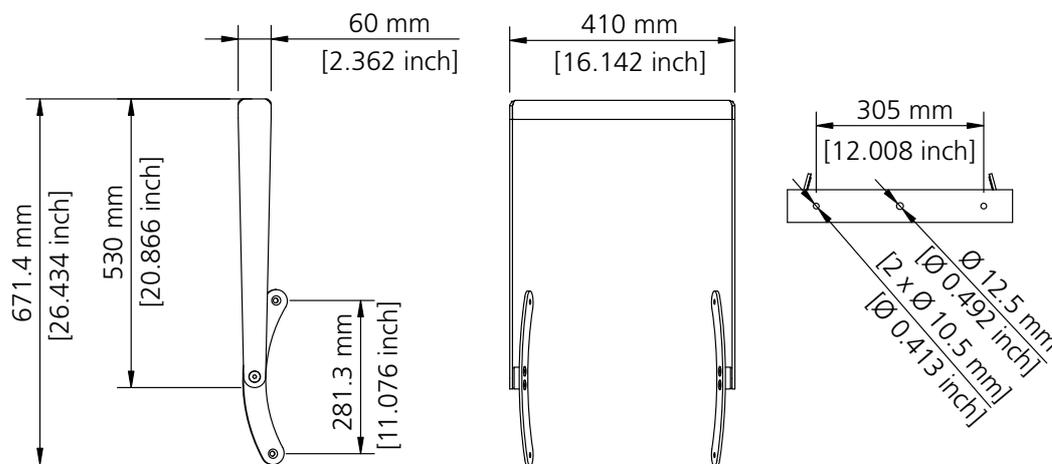


## 2.4 Technical Specifications

### 2.4.1 Overview

<b>Load capacity</b>	1 SPECTRA 212i speaker
<b>Weight</b>	5.2 kg
<b>Colors</b>	RAL 9005 (black), standard RAL 9010 (white), standard RAL spot color, on request

### 2.4.2 Dimensions



### 3 Safety Instructions

#### WARNING

#### Risks imposed by falling or overturning parts

- Be sure to install, suspend, fasten, and use Kling & Freitag speaker accessories only using the designated fixtures as specified in this document.
- Be sure to use only the screws supplied with the speaker for mounting accessories. The screws are specifically designed for accessory mounting. Be sure to use self-locking screws no more than five times. Using them more often may result in screws loosening in operation. If in doubt, use new screws. Never use other types of screws.
- During installation, be sure to cordon off the installation site to prevent any risks caused by falling parts.

#### Safety Instructions for Suspending the Speakers

Suspended loads pose a safety risk.

- All installation works including suspension as well as ceiling mount to be performed by qualified event technicians or appropriately trained persons.
- Only qualified technicians are permitted to perform the installation steps. Be sure to use personal protective equipment at all times.
- Be sure to have all works carried out by untrained hands checked and approved by a qualified expert.
- The technicians installing the speaker on site are responsible for and guarantee safe setup and use.
- Installing and dismantling the speaker system requires two persons or a suitable lift for carrying and handling.
- Before installing, check the stability, strength, and materials of walls, ceilings, and boarding. For example, always use appropriate wall anchors for panels and check for sufficient strength.
- Note that the suspension points on the hall ceiling (i.e. shackles, attachment points, or chain hoists) must comply with the DGUV regulations 17 (BGV C1) or similar locally applicable accident-control standards. The maximum load must have been certified by an authorized expert.
- Be sure to tighten all bolts and screws to the specified torque.
- Unless otherwise stated, use only KLING & FREITAG original parts for mounting the speakers. Never use other parts (in particular, parts not made by KLING & FREITAG).
- Make sure all fittings used are suitable for the task at hand and meet all relevant safety requirements.
- Ensure that all connections are secured against coming loose and that only authorized, statically tested and correctly sized supports, mounting equipment, wire ropes and chains are used.
- Be sure to always visually inspect all safety-related speaker and accessory components before use. If there are signs of wear, cracks, or deformation, etc., replace the affected parts immediately. Visual inspection also includes checking all screwed connections of supporting components.
- The information described here does not relieve the user of the duty to follow the given safety requirements and legal regulations.

## 4 Installation

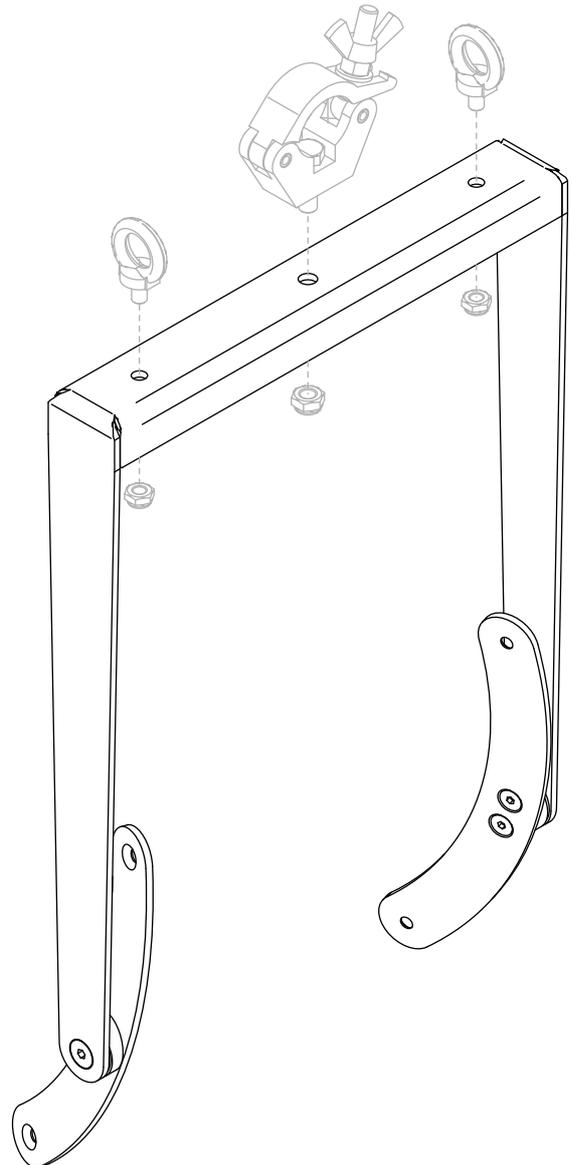
### 4.1 Required Tools

Required Tools
IS5 hexagon socket wrench
IS6 hexagon socket wrench

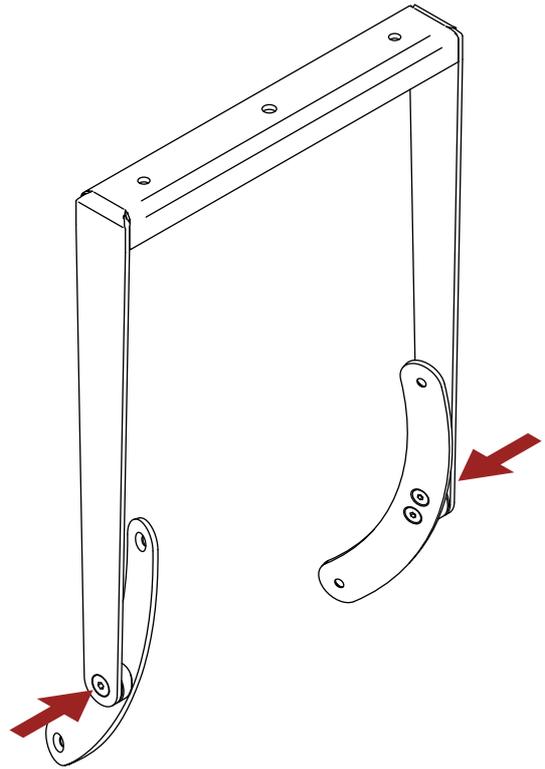
### 4.2 Preassembling the Speaker

When using optional accessories, be sure to follow all instructions in the respective manuals.

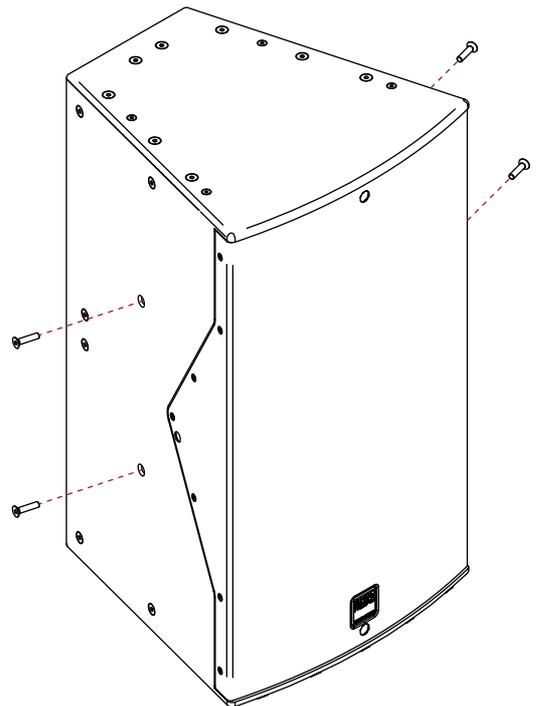
1. Mount any optional accessories required for installation to the holes provided in the bracket base.



2. Slightly loosen the mounting-plate fixing screws until you can rotate the plates.



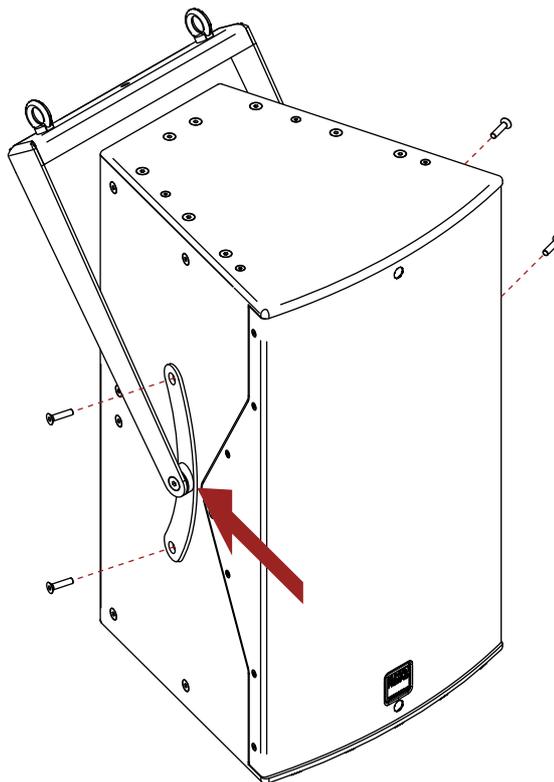
3. Loosen the mounting screws on the speaker.



4. Place the U mounts as appropriate.

Make sure that the curved parts of the plates are oriented towards the front; otherwise, the suspension will be outside the center of gravity.

5. Hand-tighten the mounting screws.



**⚠ WARNING**

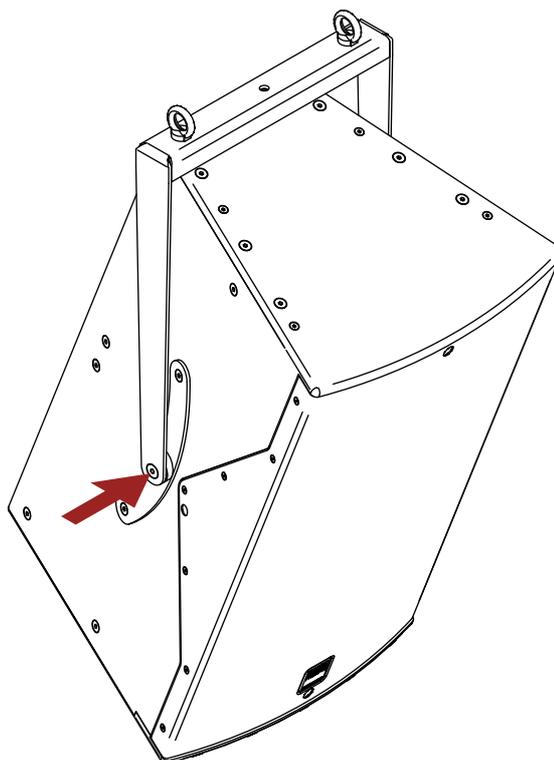
**Risks imposed by falling parts**

Be sure to use self-locking screws no more than five times. Using them more often may result in screws loosening in operation. If in doubt, use new screws. Never use other types of screws.

### 4.3 Ceiling mounting

**WARNING****Risks imposed by falling parts**

- Before installation, consider the load-bearing capacity, strength, and structure of ceilings and formwork. Be sure to use suitable anchors and check for required strength.
  - Note that the suspension points on the hall ceiling (i.e. shackles, attachment points, or chain hoists) must comply with the DGUV regulations 17 (BGV C1) or similar locally applicable accident-control standards. The maximum load must have been certified by an authorized expert.
1. Prepare ceiling attachment. Be sure to consider the ceiling specifics as well as the properties of the selected fasteners. For bore spacing, see »Dimensions« on page 7.
  2. Place the preassembled speaker on a suitable lift. To facilitate attachment, we recommend using a lift with an accessible platform.
  3. Lift the speaker to the required height, then mount it to the designated position.
  4. Adjust the speaker tilt as desired, then retighten the fixing screws on the mounting plates.



## 5 Maintenance

- Perform a visual inspection before each installation.
- Visually inspect the entire setup every six months.
- When performing those checks, particularly look for deformations, cracks, dents, damage to threads, and corrosion. Also check slings and lifts (e.g. shackles, chains, and steel ropes) carefully for wear and deformation.

### WARNING

#### **Risk of falling parts due to undetected damage**

- The test must be performed by a qualified person only.
- If as a result of these checks any uncertainty should arise with regard to safety or defects are found, don't use the speaker any longer. Contact your retailer.
- Be sure to use self-locking screws no more than five times. Using them more often may result in screws loosening in operation. If in doubt, use new screws. Never use other types of screws.
- All repair work must be performed by Kling & Freitag after evaluation carried out by engineering.
- Many countries require regular inspection of mounting components and accessories. An additional annual inspection is typically required to be performed by a technical expert. Moreover, a legally certified or official authority must perform a detailed inspection every four years.
- Therefore, be sure to maintain an inspection log. Enter the values determined for each speaker and accessory during the periodic checks into this log. This way, relevant data are always at hand in case of inspection. This inspection log book shall be updated with the inspection steps, test intervals and parts lists.
- If necessary, use multifunction oil for care.

## 6 Transportation and Storage

This product is protected against the effects of temporary humidity and moisture, etc. Nevertheless, be sure to store, transport, and use it in dry

Make sure that the system is adequately ventilated during longer storage periods so any residual moisture can escape from the equipment.

In addition, make sure that the product is protected from mechanical strains in order to prevent damage.

To protect the speaker from the above impacts, we recommend using suitable transport and storage equipment.

## 7 Disposal

Dispose of this product according to local ordinance regulations.

## 8 Declaration of Conformity

### EG-Konformitätserklärung

(Declaration of EG-Conformity)



<b>Hersteller:</b> (Manufacturer)	Kling & Freitag GmbH Junkersstraße 14 30179 Hannover Deutschland
<b>Bevollmächtigter für die Zusammenstellung der technischen Unterlagen:</b> (Authorized representative for the compilation of technical documents)	Kling & Freitag GmbH Abt. Entwicklung Dipl. Ing. Arne Muscheites +49 (0)511 / 96997-50 Deutschland
<b>Produkt:</b> (Product)	<b>Lautsprecherzubehör</b> (Loudspeaker Accessories) <b>K&amp;F SPECTRA 212i Deckenhalter</b> (K&F SPECTRA 212i Ceiling Bracket)

**Hiermit erklären wir, dass das genannte Produkt den Schutzanforderungen der folgenden EG-Richtlinien entspricht, einschließlich deren zum Zeitpunkt dieser Erklärung gültigen Änderungen:**

(We hereby declare that the designated product is compliant with the safety requirements of the following EU directives - including the changes which applied at the time of the declaration:)

- 2006/42/EG, Maschinenrichtlinie (Machinery Directive)

**Folgende internationale und nationale Normen und Vorschriften wurden angewandt:**

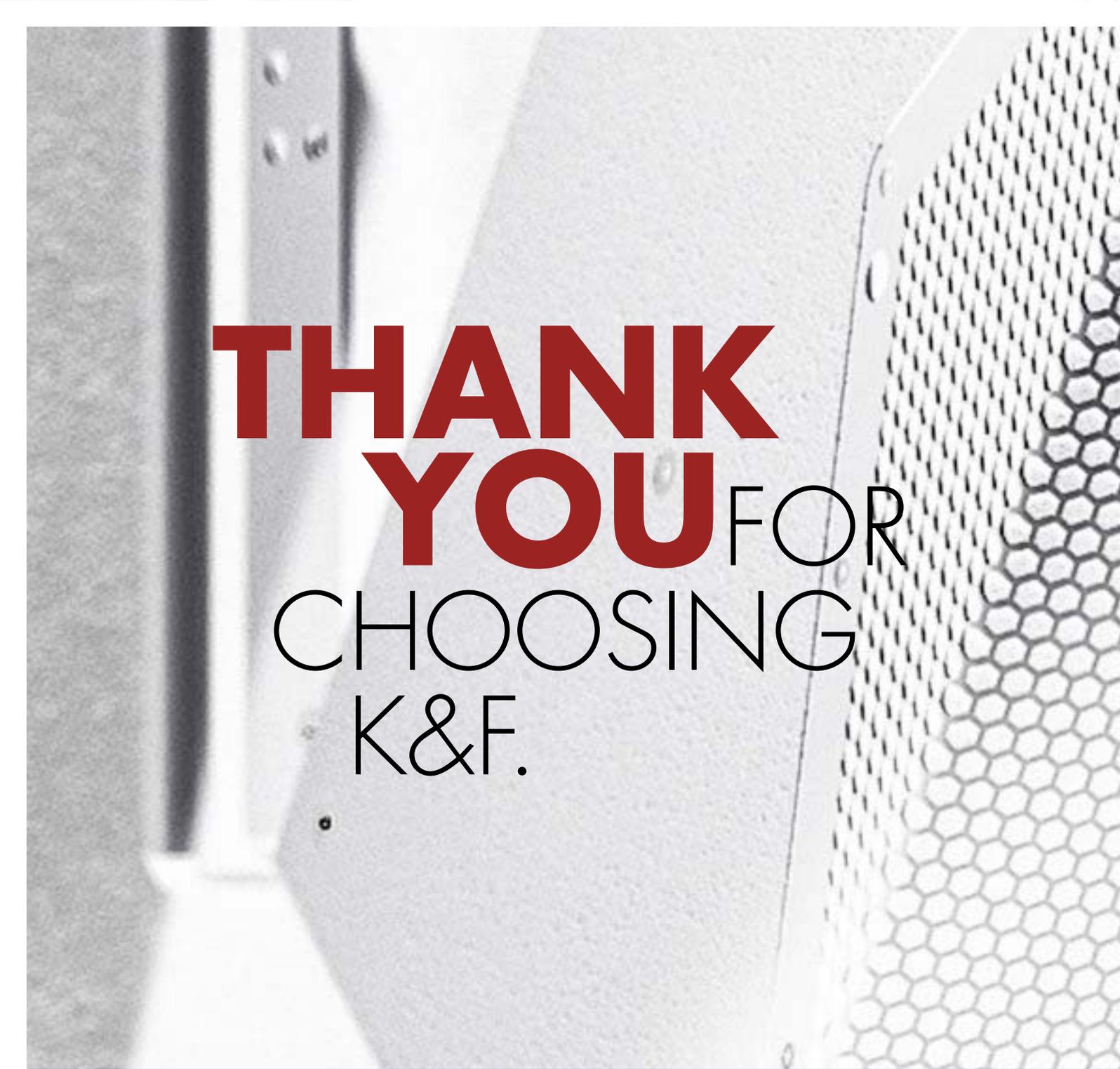
(The following national and international standards and specifications were applied:)

- Eurocode 1/DIN EN 1991-1-1 : 12/2010
- Eurocode 3/DIN EN 1993-1-1 : 12/2010
- DIN EN ISO 12100 : 2011-03
- DIN ISO/TR 14121-2 : 2013-02
- DGUV Vorschrift 17 (BGV C1)

Hannover, 24.02.2021

  
Jürgen Freitag, Geschäftsführung (CEO)





**THANK  
YOU** FOR  
CHOOSING  
K&F.



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