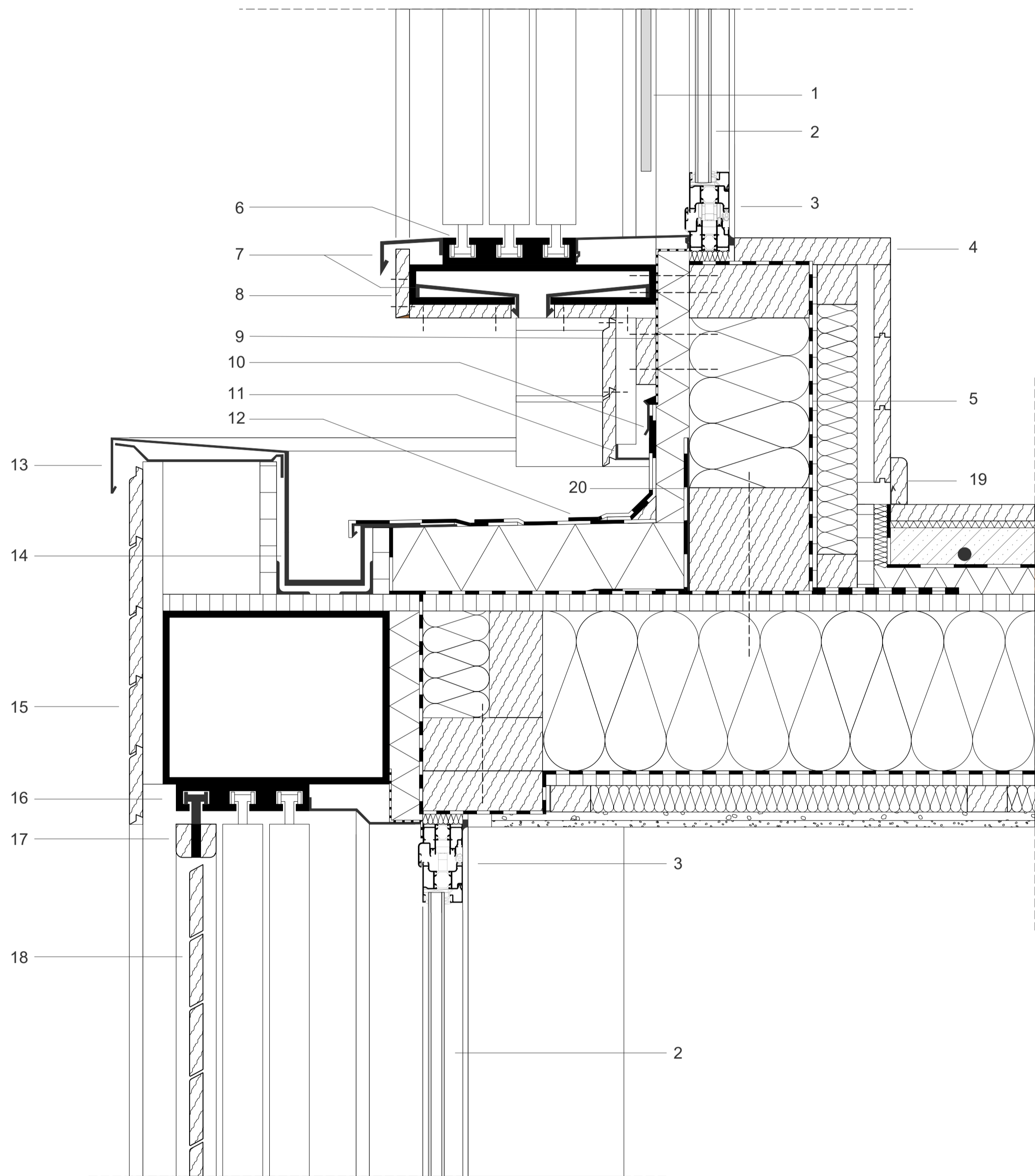
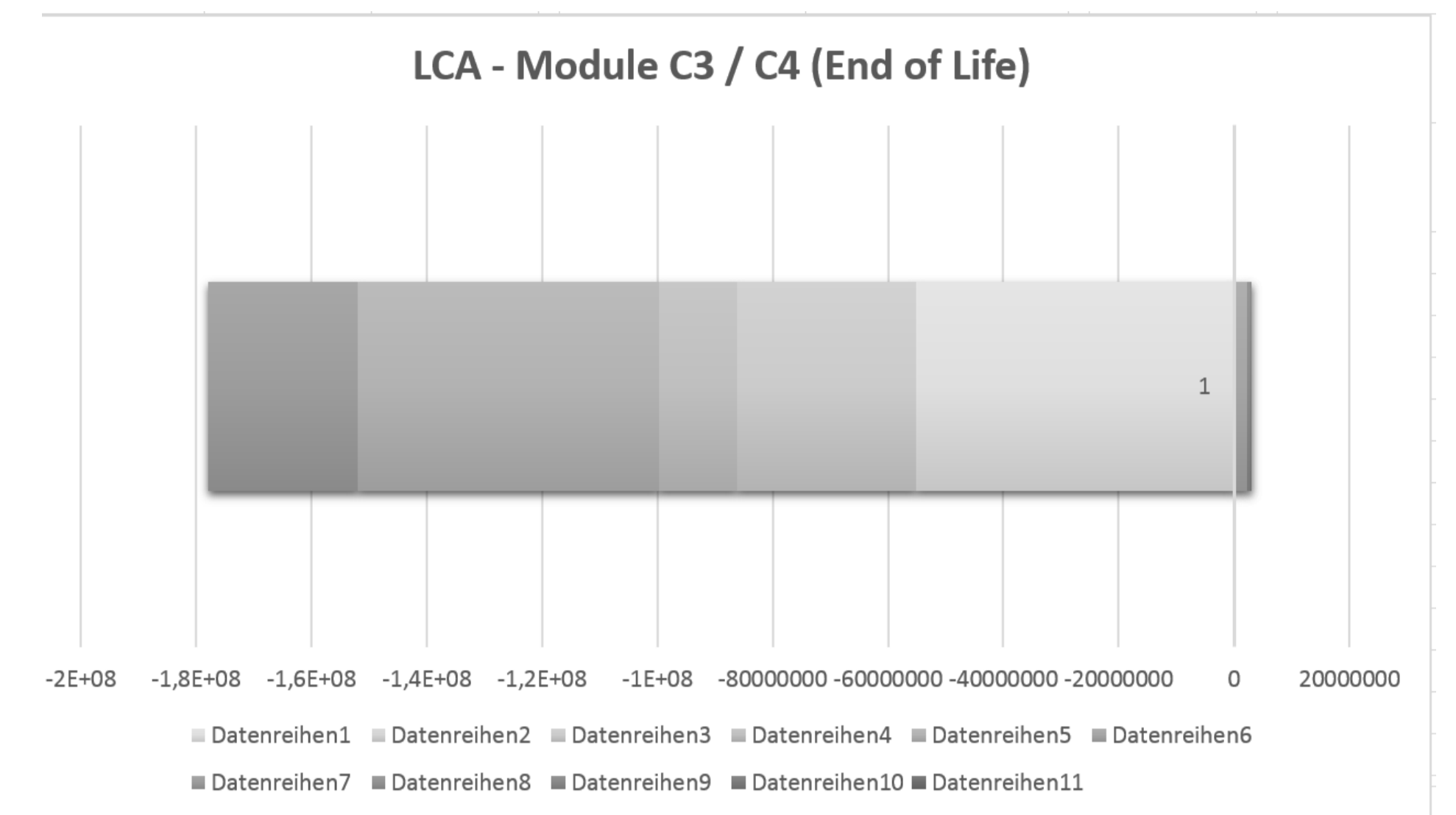
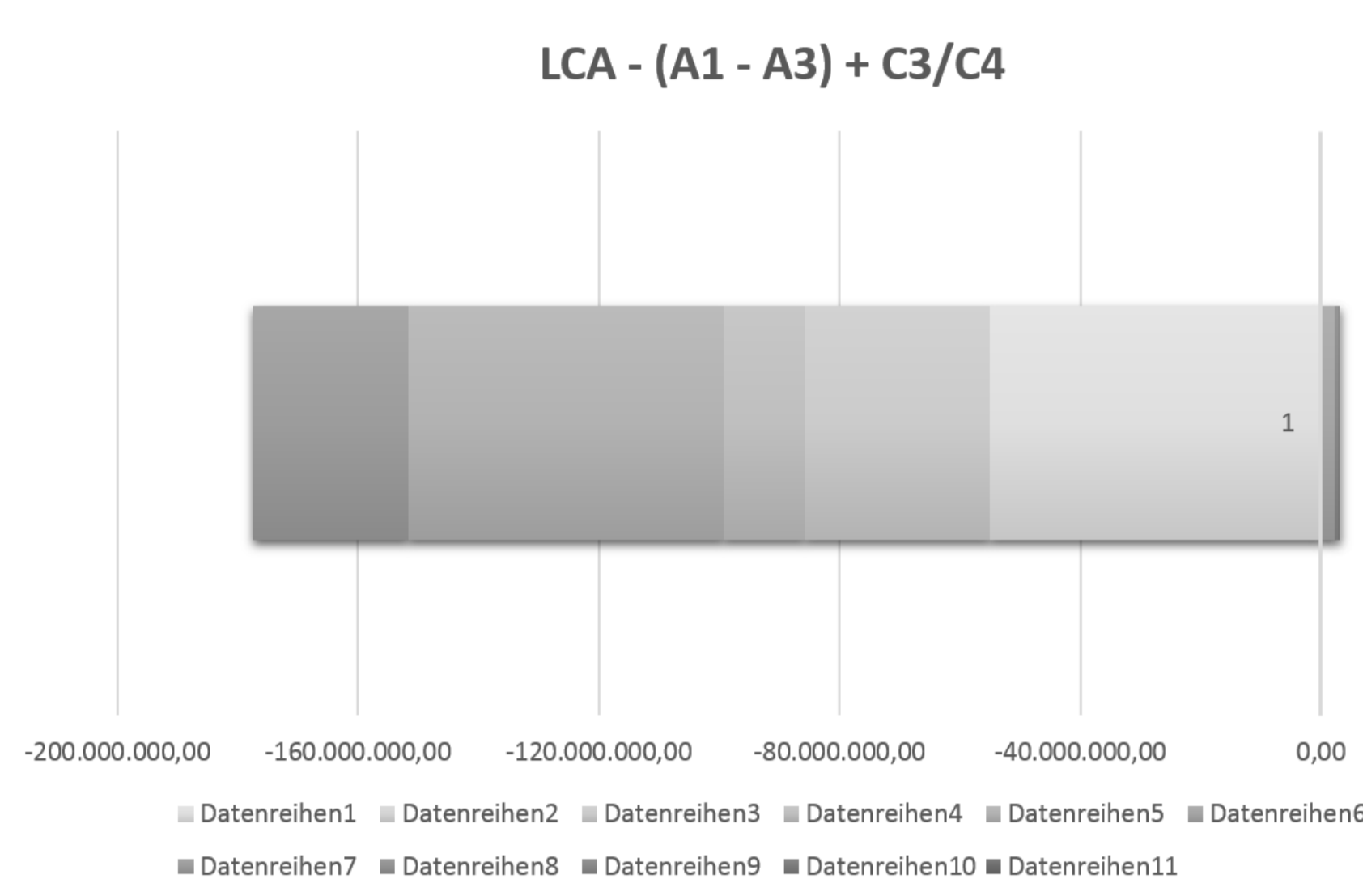
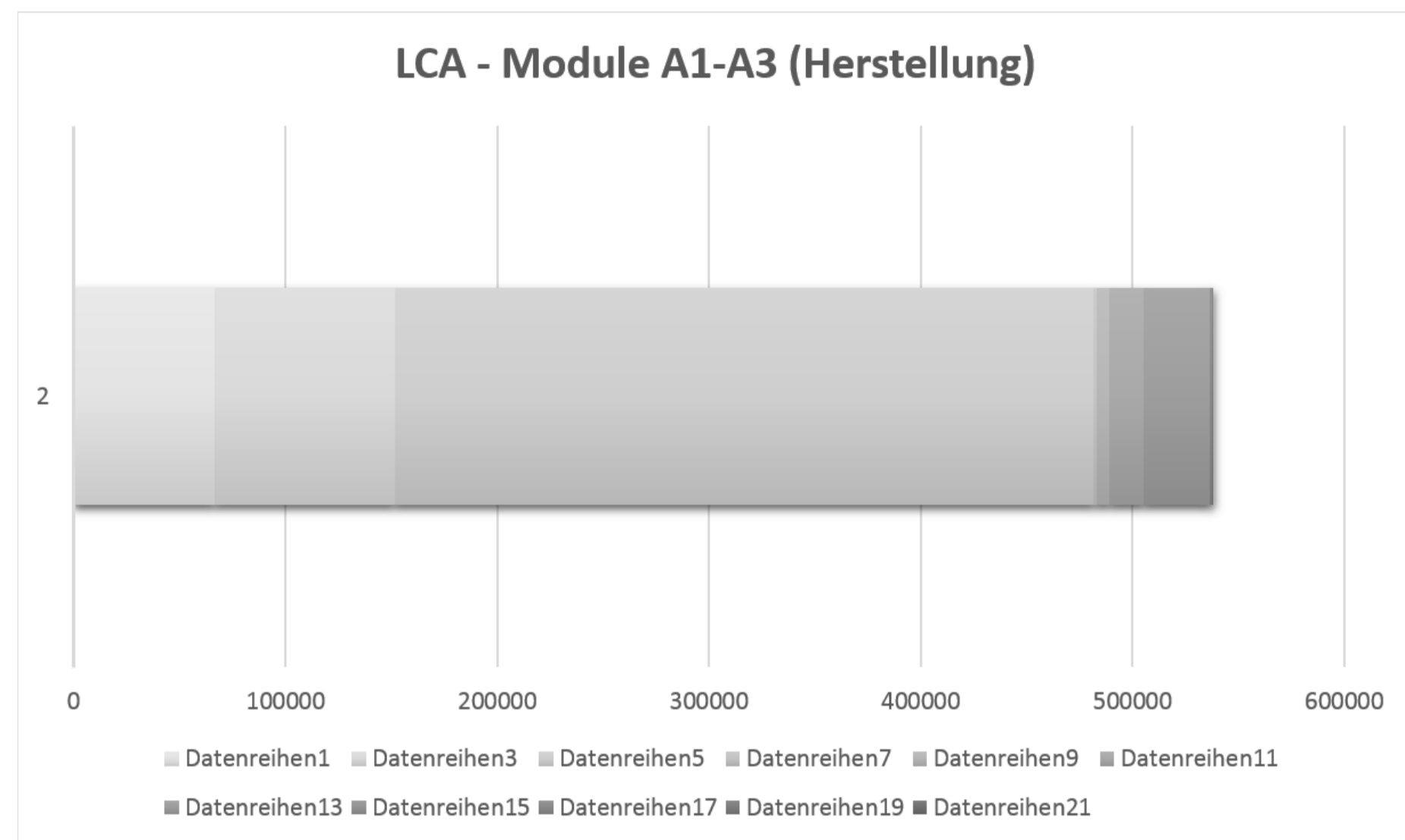


NACHHALTIGES KONSTRUIEREN

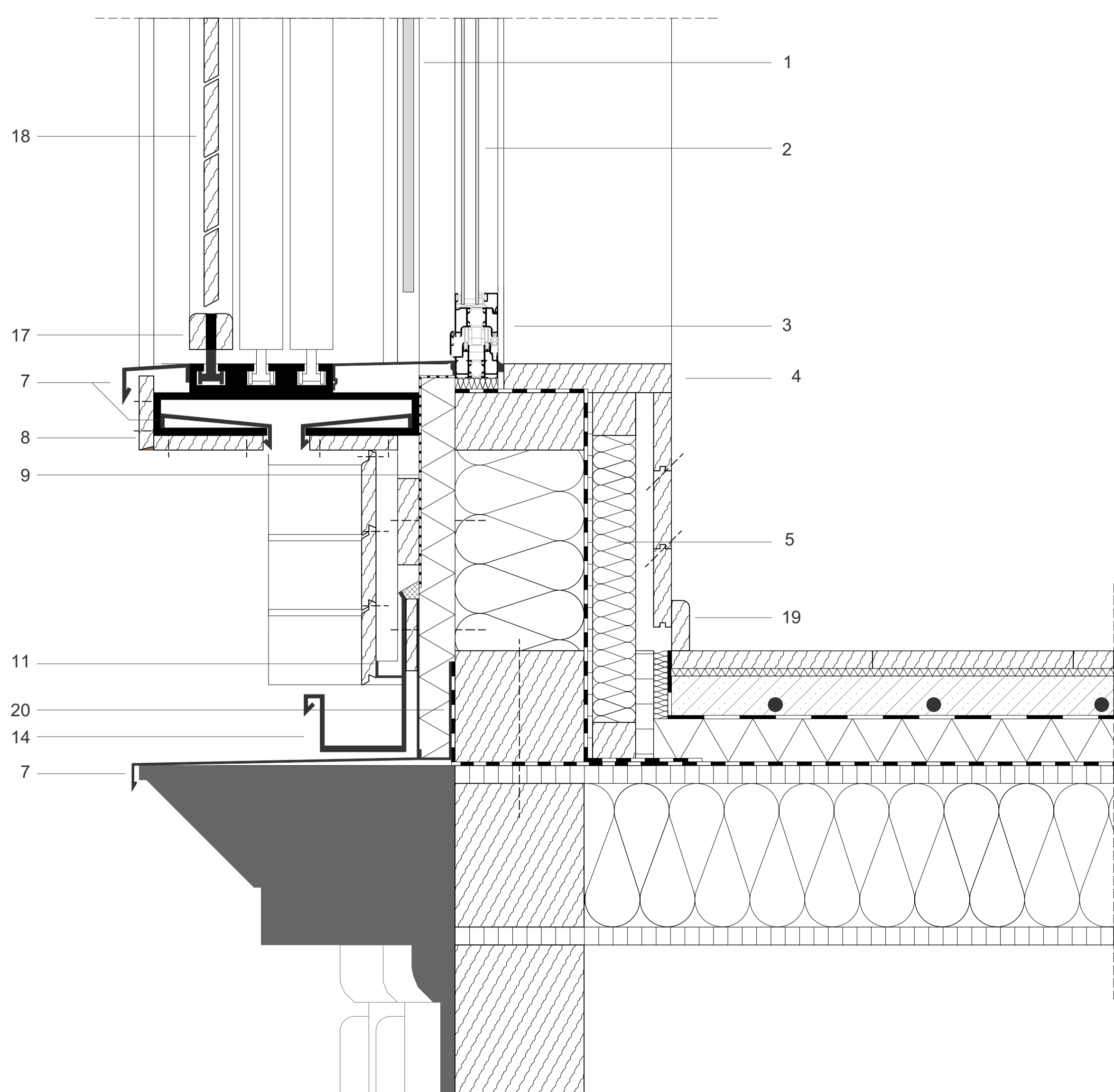
Prof. i.v. Dipl.-Ing. Norbert Hanenberg | M.A. Max Ernst

Mario Bergen | Thomas Hagedorn

ÖKOBILANZ

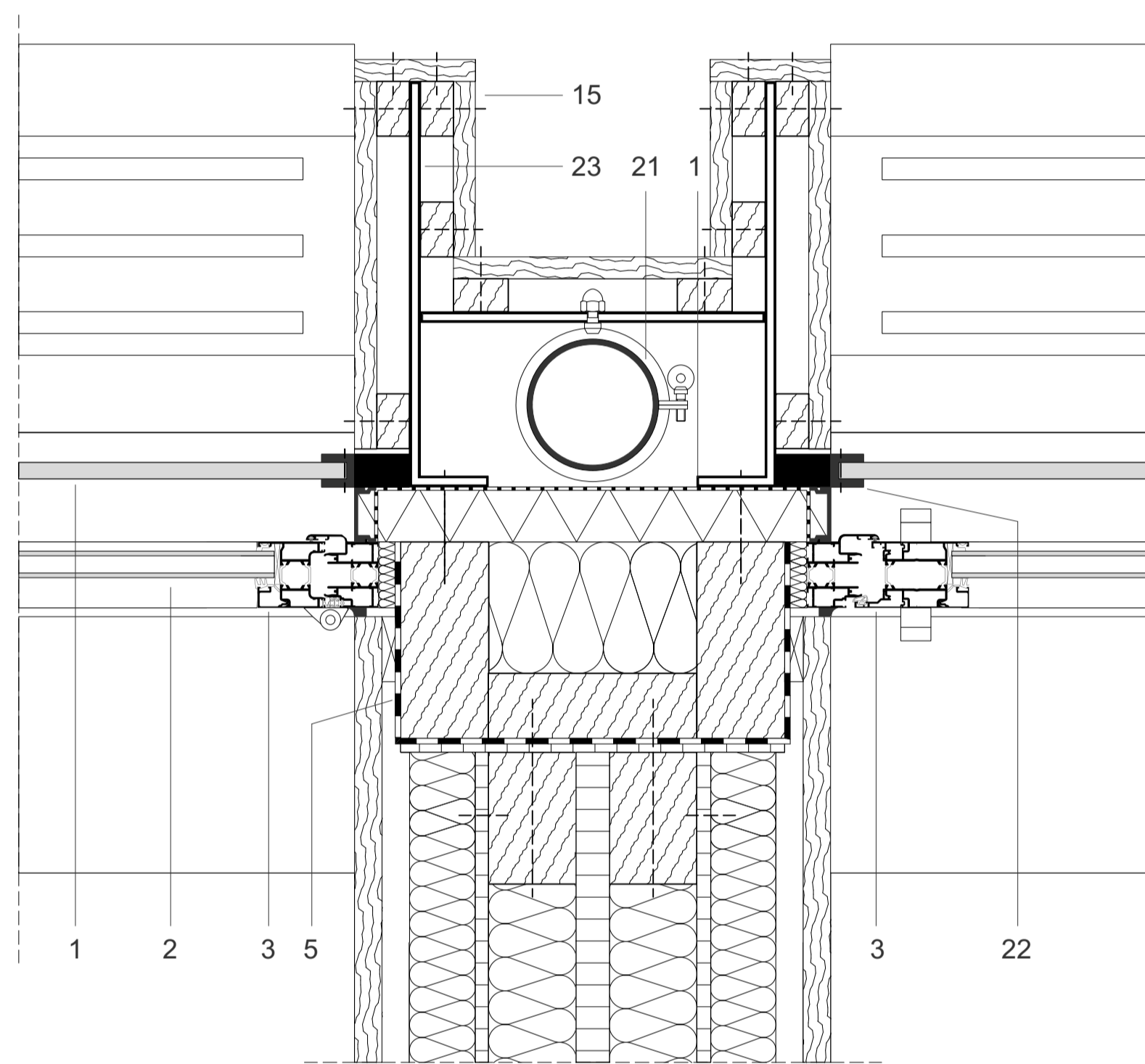


Detail 1 | 1:5

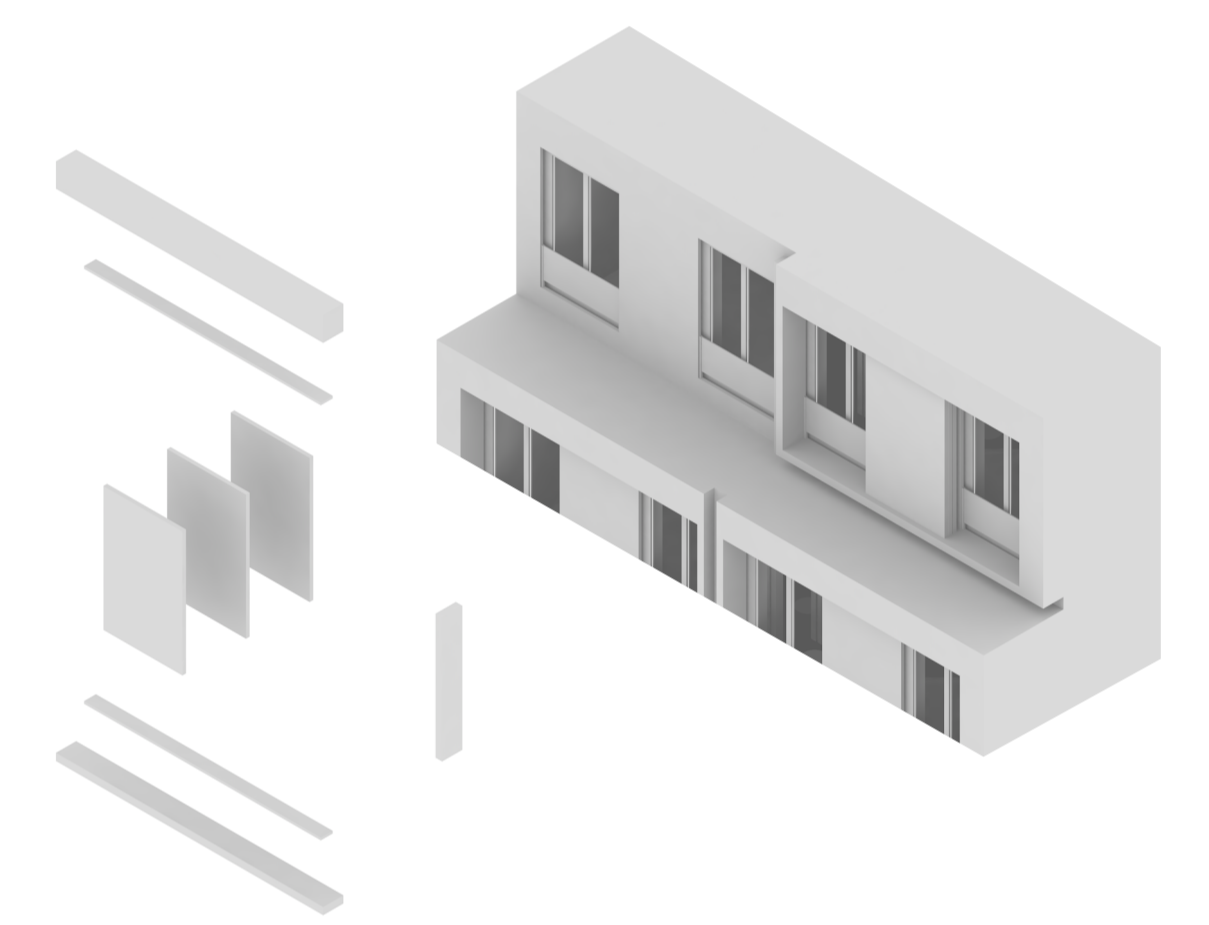
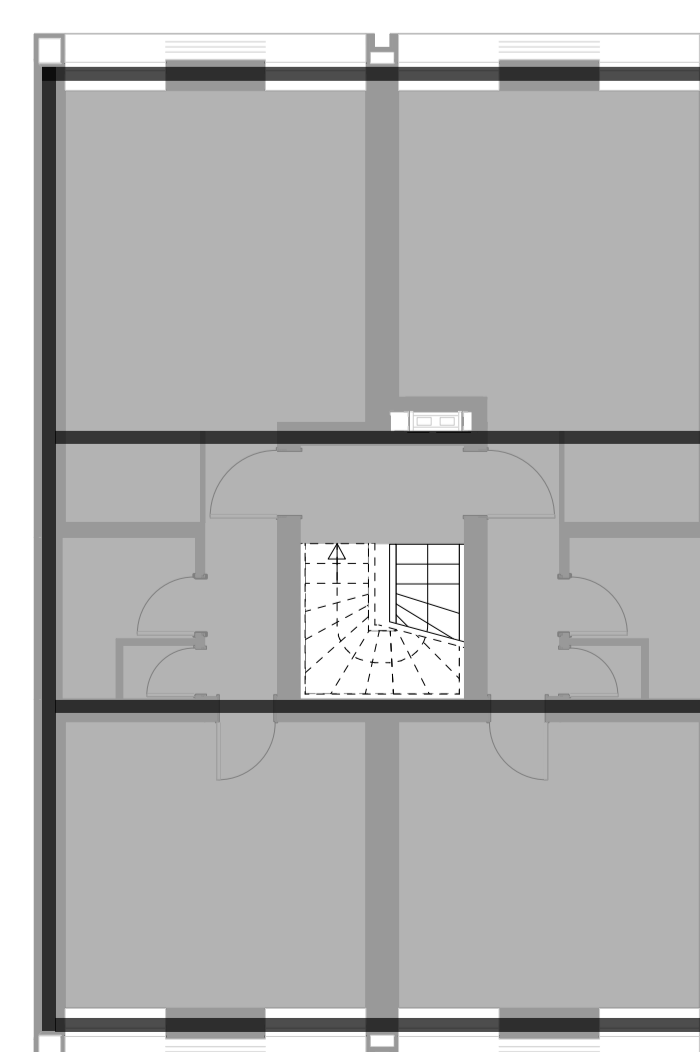
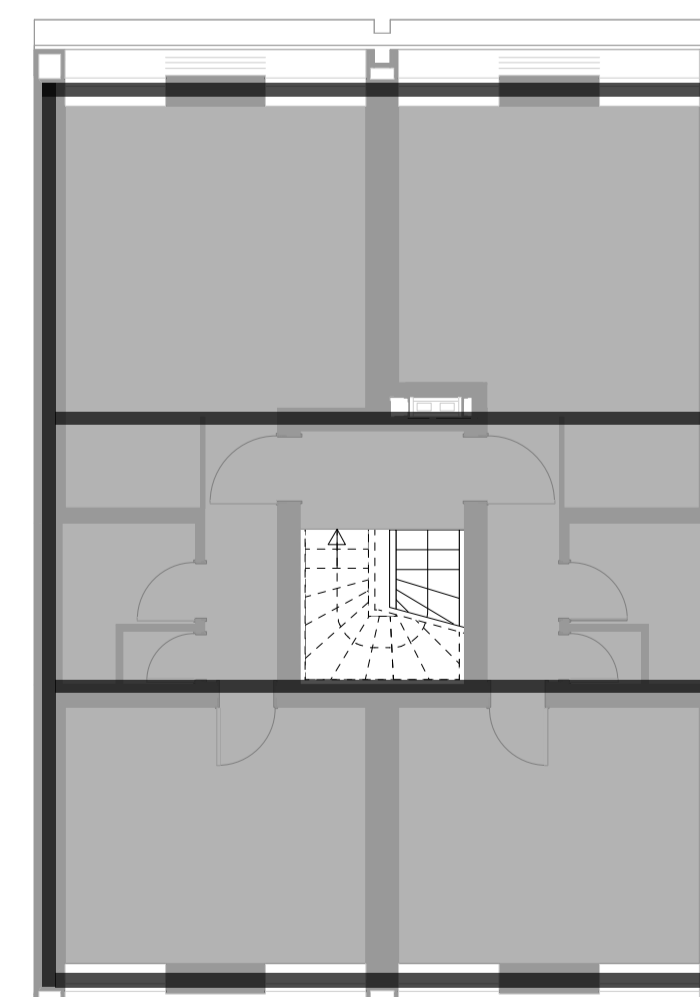
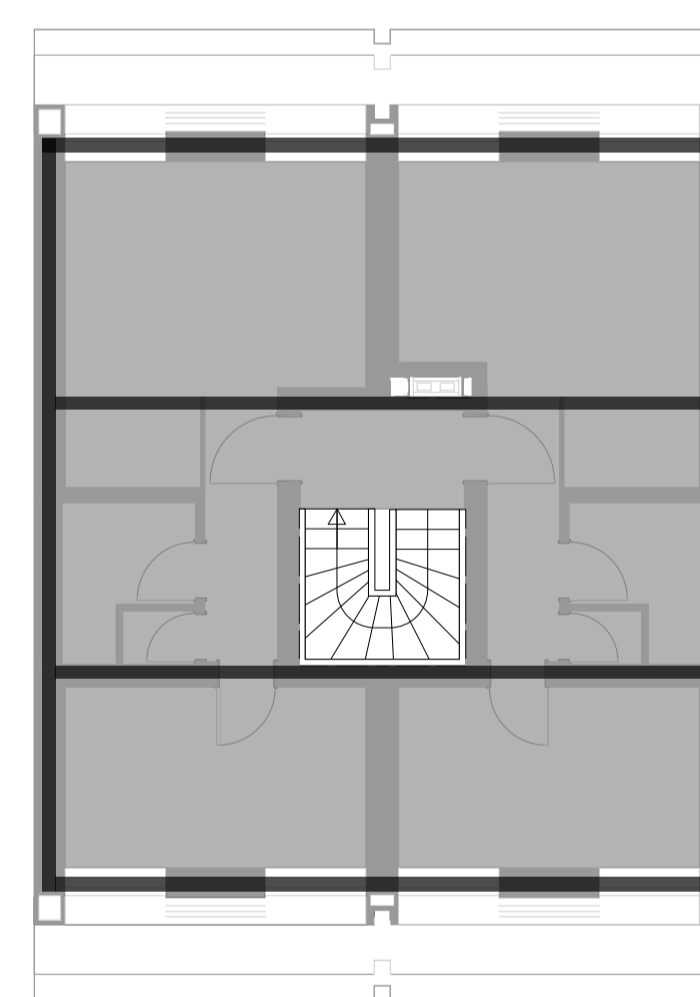


Detail 2 | 1:5

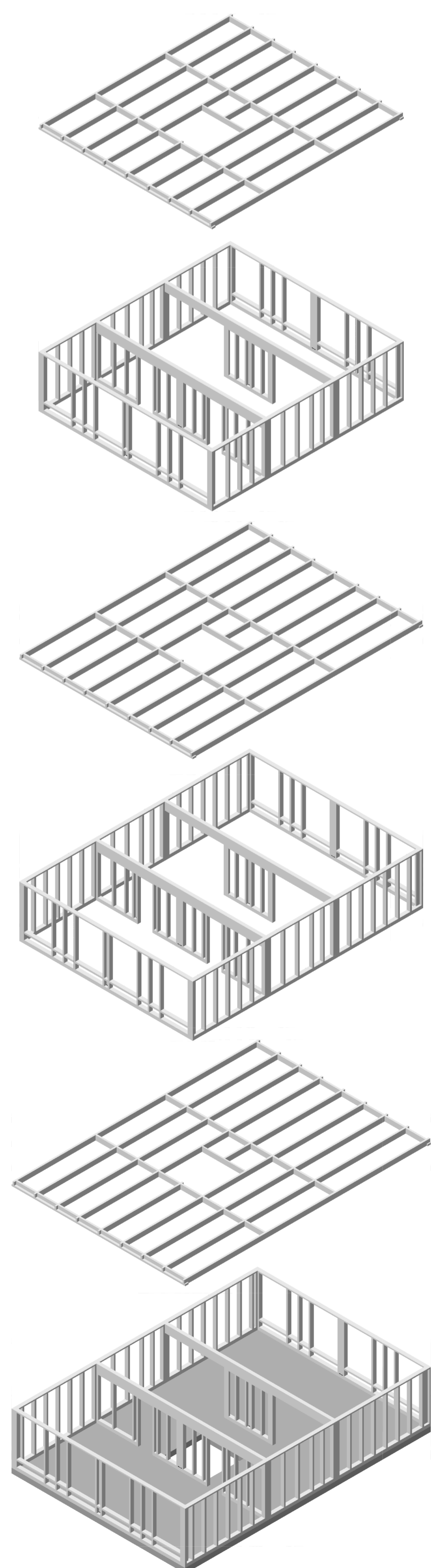
- 1 Einscheibensicherheitsglas 15 mm
- 2 Zweifach-Isolierverglasung 24 mm
- 3 Aluminium-Fensterprofil (Solarlux SL60)
- 4 Holz-Fensterbank, Fichte 40 mm
- 5 Dampfbremse, PE-Folie
- 6 Aluminium-Führungsschiene auf Aluminiumprofil
- 7 Aluminium-Abdeckblech
- 8 Brettschalung, Douglasie
- 9 Windpapier
- 10 Aluminium-Wandanschlusschiene
- 11 Aluminium-Insektengitter
- 12 Elastomerbitumen-Schweißbahn
- 13 Gefälledämmung, Holzfaser 100-120 mm
- 14 Elastomerbitumen-Dampfspererschweißbahn
- 15 Aluminium-Mauerabdeckprofil
- 16 Aluminium-Regenrinne
- 17 Rombus-Schalungsprofilbrett 20/120 mm, Douglasie, horizontal
- 18 Aluminium-Führungsschiene an Aluminiumprofil
- 19 Rahmen Sonnenschutzelement
- 20 Rombus-Profilbrett 20/110 mm, Douglasie, horizontal
- 21 Holz-Fußleiste, Douglasie 25/70 mm
- 22 Aluminium-Winkelblech
- 23 Aluminium-Fallrohr mit Standrohrschelle
- 24 Edelstahl-Glashalterung
- 25 Stahl-Halterungsprofil



Detail 3 | 1:5



Explosionsdarstellung Sonnenschutz-Modul | maßstabslos



Grundrisse und Axonometrien der Tragstruktur | 1:200 / maßstabslos