

Produktion af freeform beton

Dansk Betondag

Dato 22/09/11



ADAPA - Adapting Architecture



Administrerende Direktør

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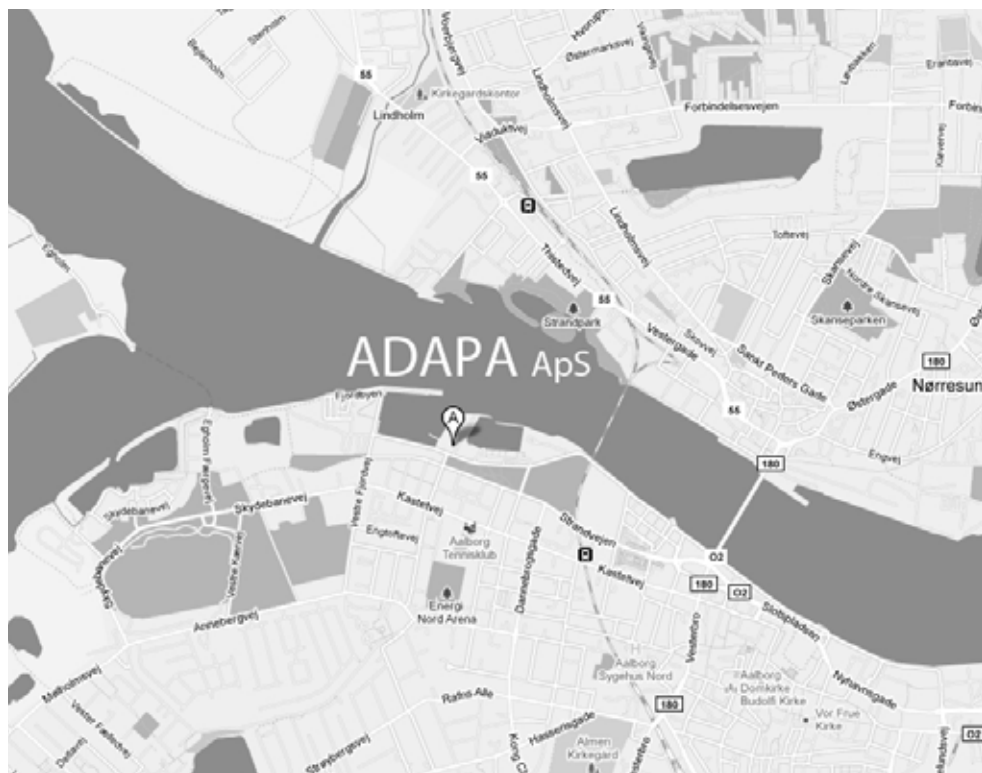
ADAPA

Hvor?

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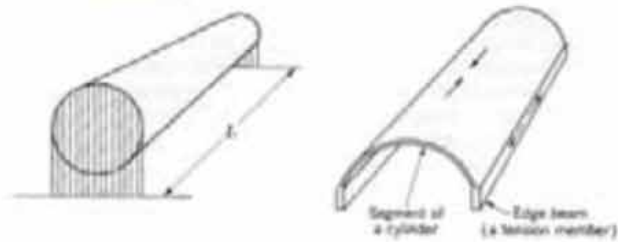


Hvorfor freeform design ?

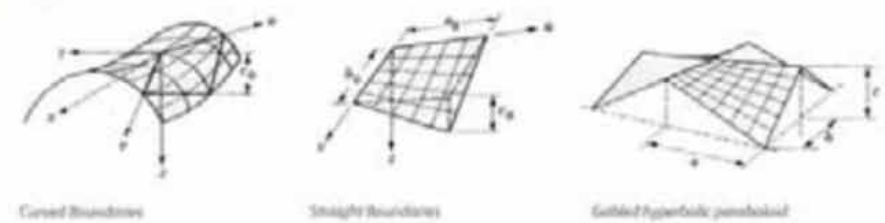
Freeform betons historie (1930-2011)

Analytiske former

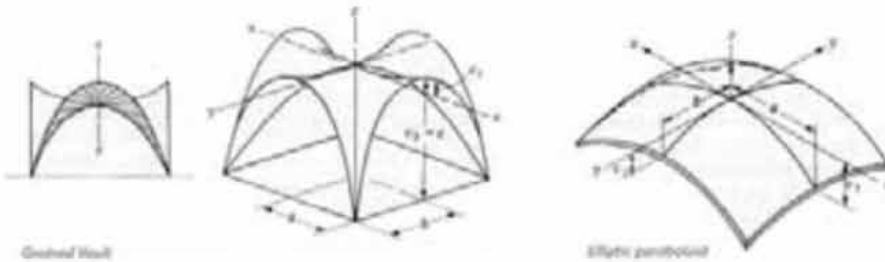
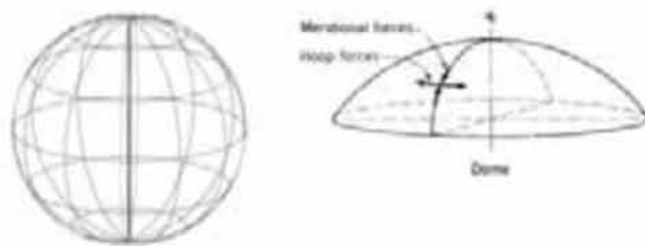
Cylinder → Tongewelf



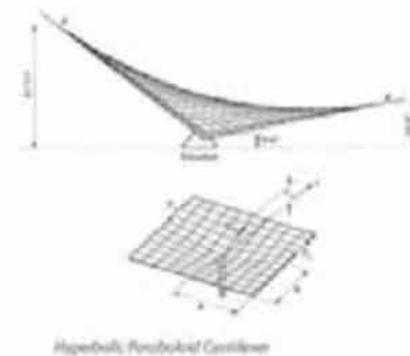
Hyperbolische Paraboloïde



Bol → Koepel



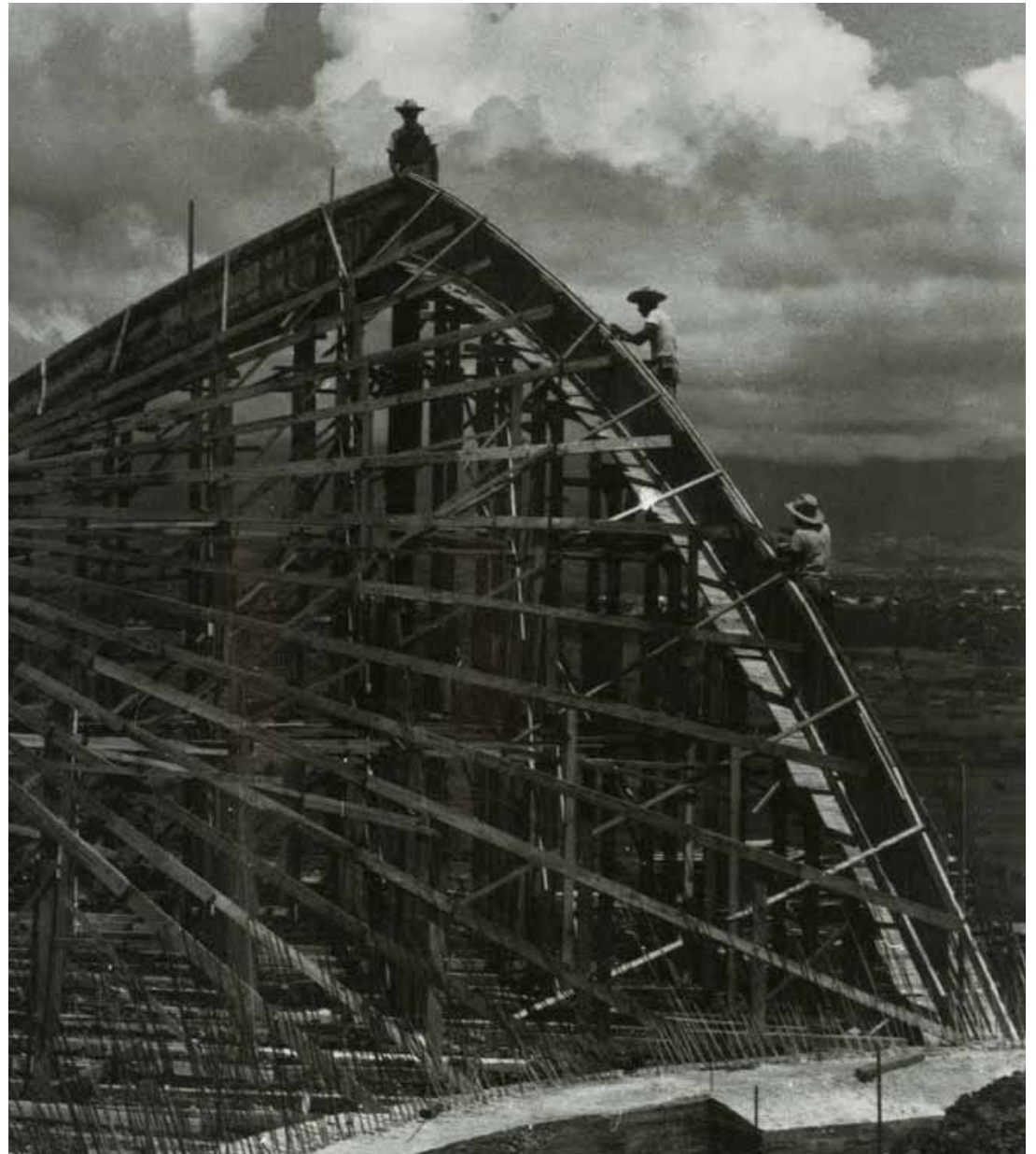
Gevouwen Plaat



Analytiske former



Open Chapel in Cuernavaca (1958) - Felix Candela



Eksperimentielle former

Erste Beobachtung



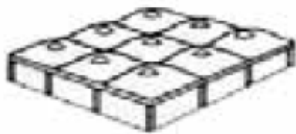
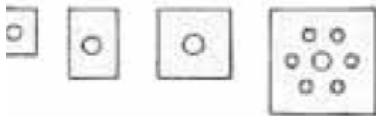
Kissen 1954



Pneumexperiment



Buckelschale



Industriebauten

Zweite Beobachtung



hängendes nasses Tuch 1955



hängende Gaze
benetzt, eingefroren umgedreht:
Eispavillon



Ireie Formen

Dritte Beobachtung



Flieform 1963

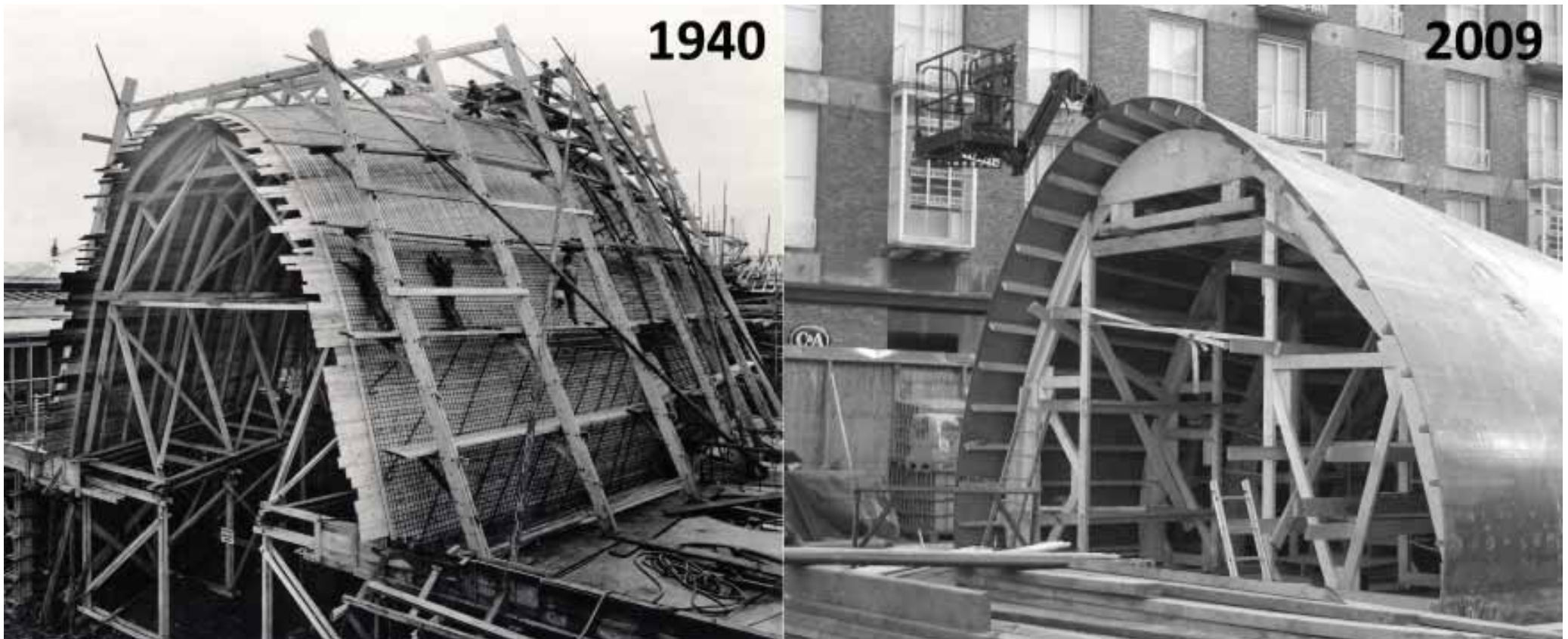




Nutidig produktion med træforskaling

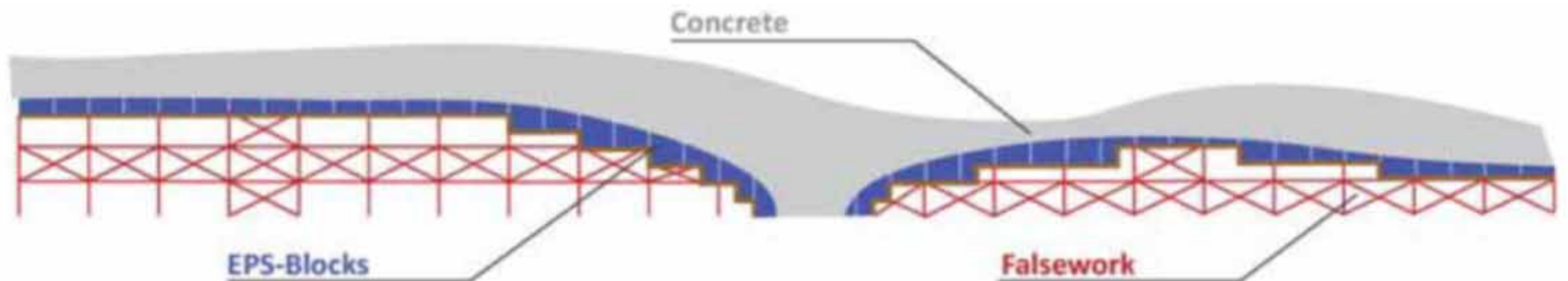
Formwork of Cement Hall (left) and bicycle parking facility (right)

Reference: Robert Maillart and the art of reinforced concrete. David P. Billington, The MIT Press, 1990

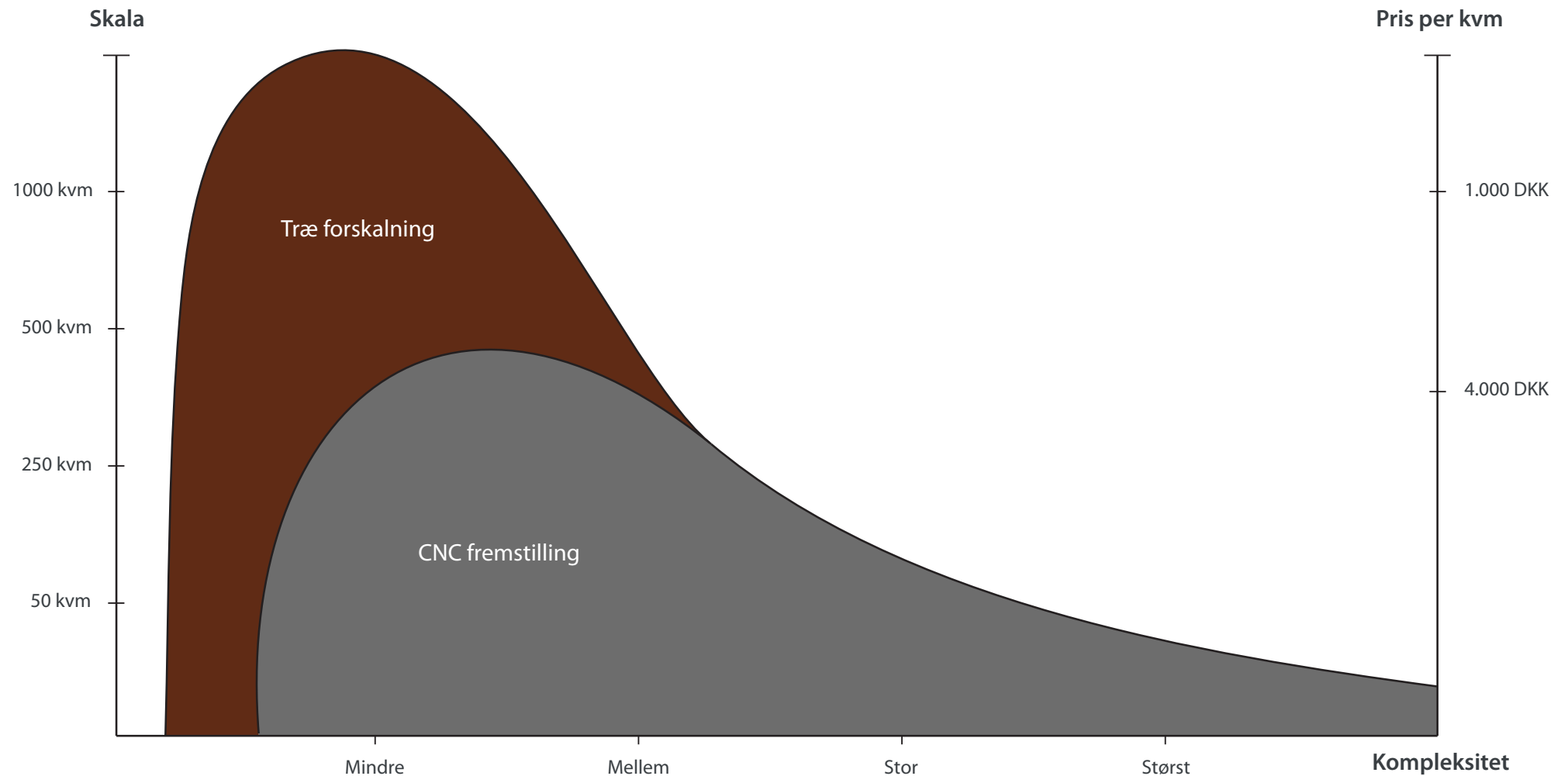


Nutidig produktion med CNC

Reference: Nedcam BV

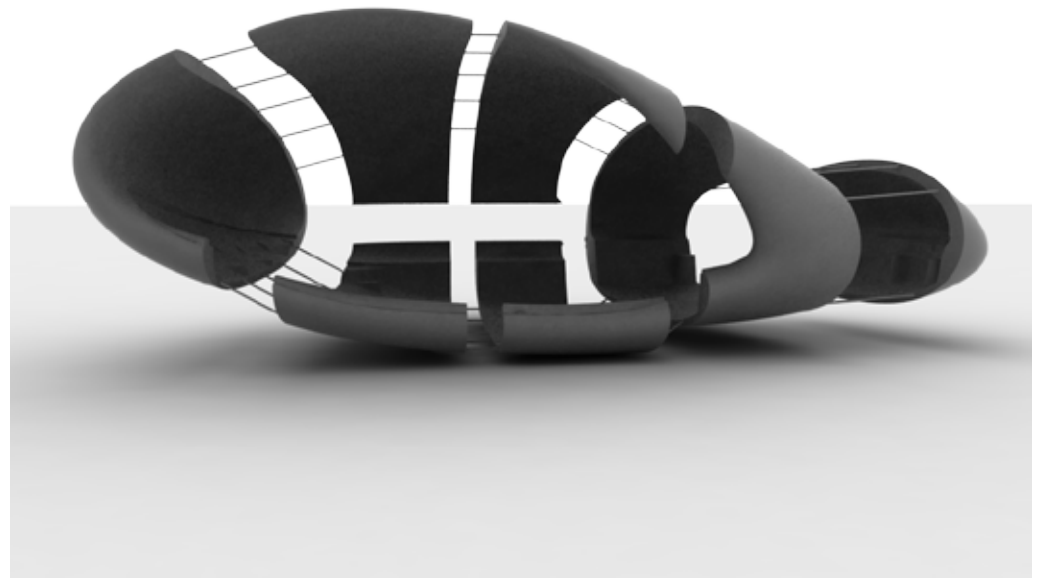


Produktionsfordeling 2010

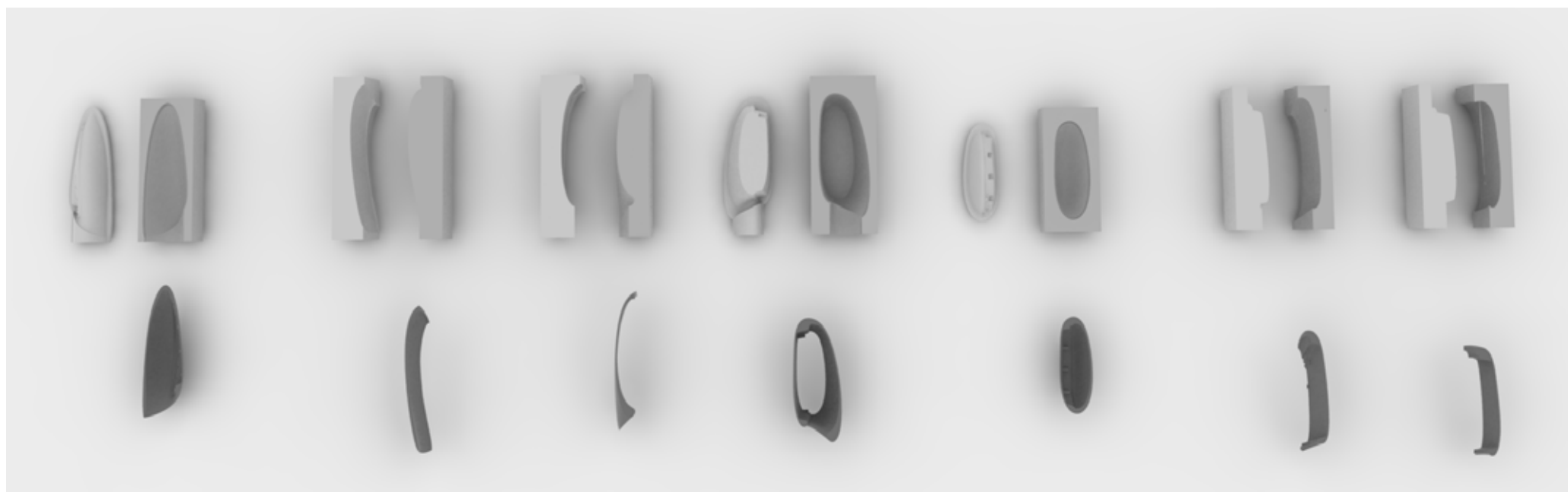
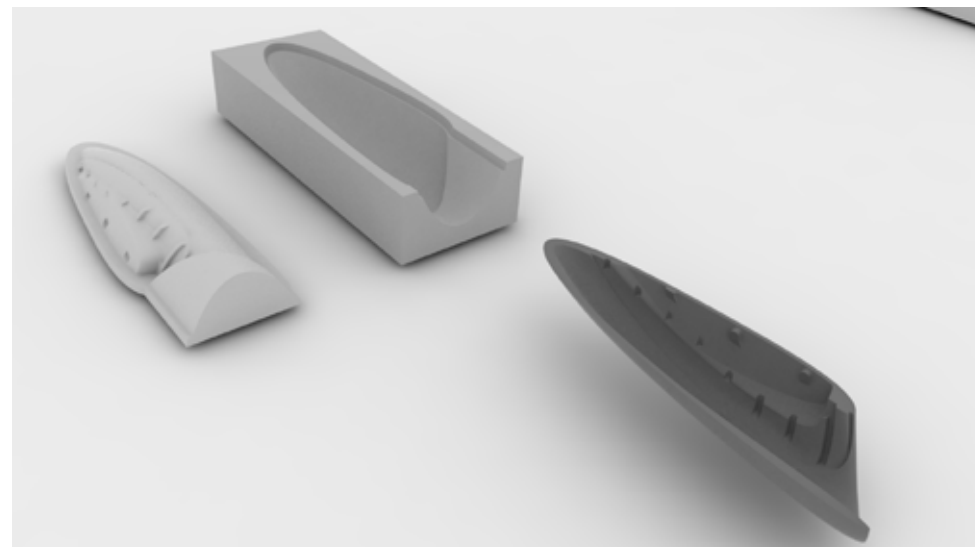


Betonskelter

CNC-produktion



CNC-produktion af forme



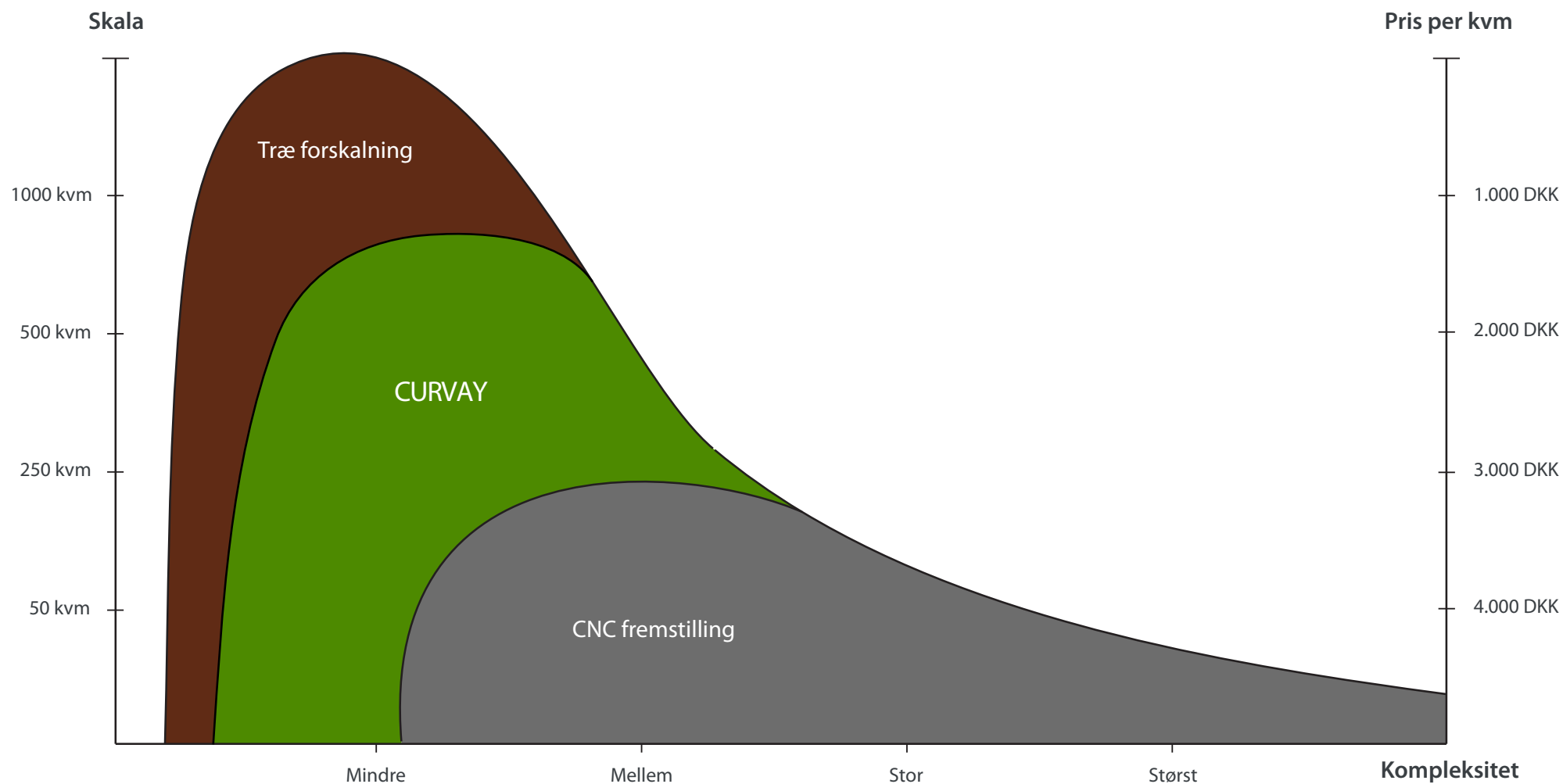
Produktion af elementer







Fremtidig produktionsfordeling





CURVAY

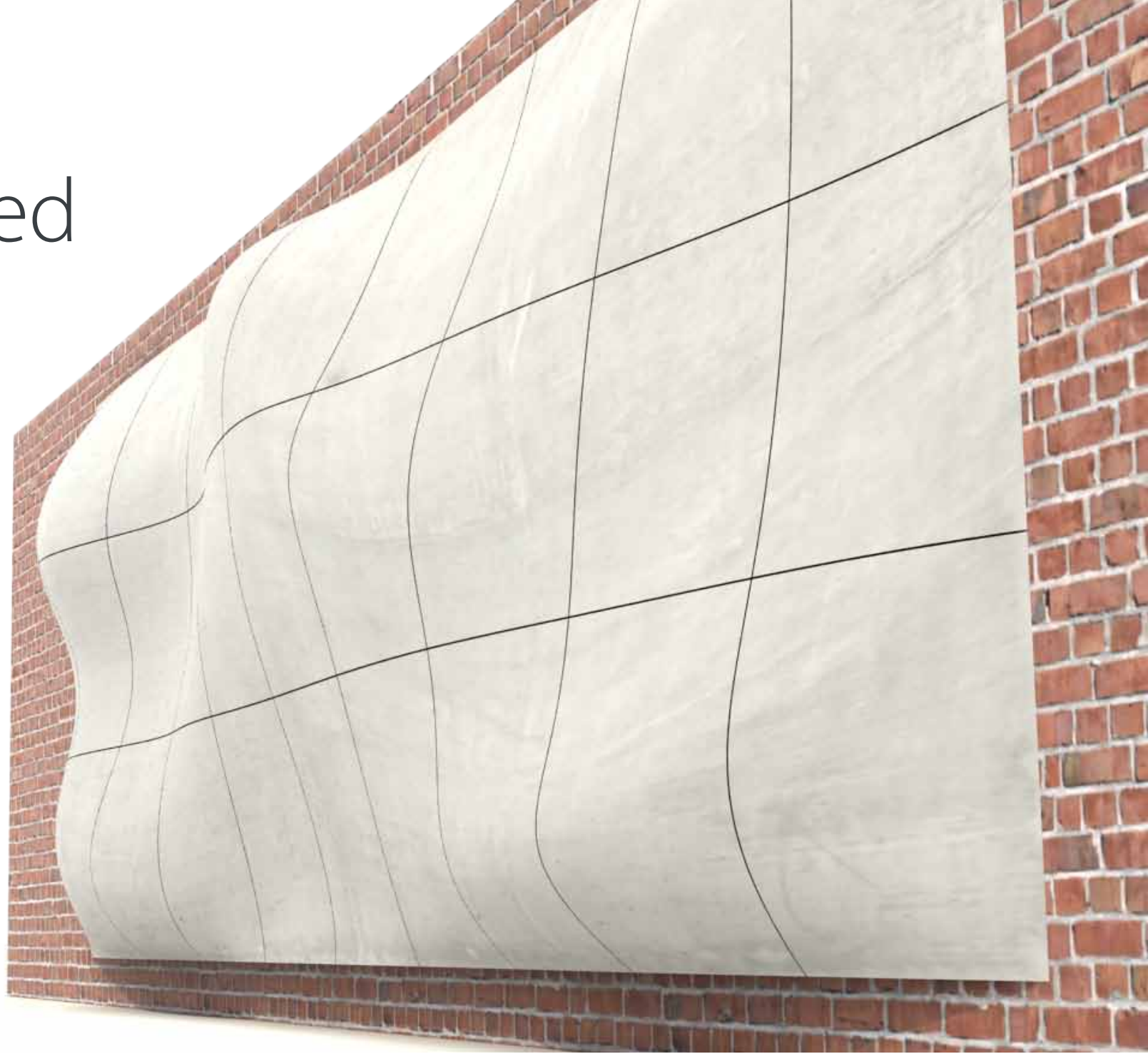
Frihed til at bygge

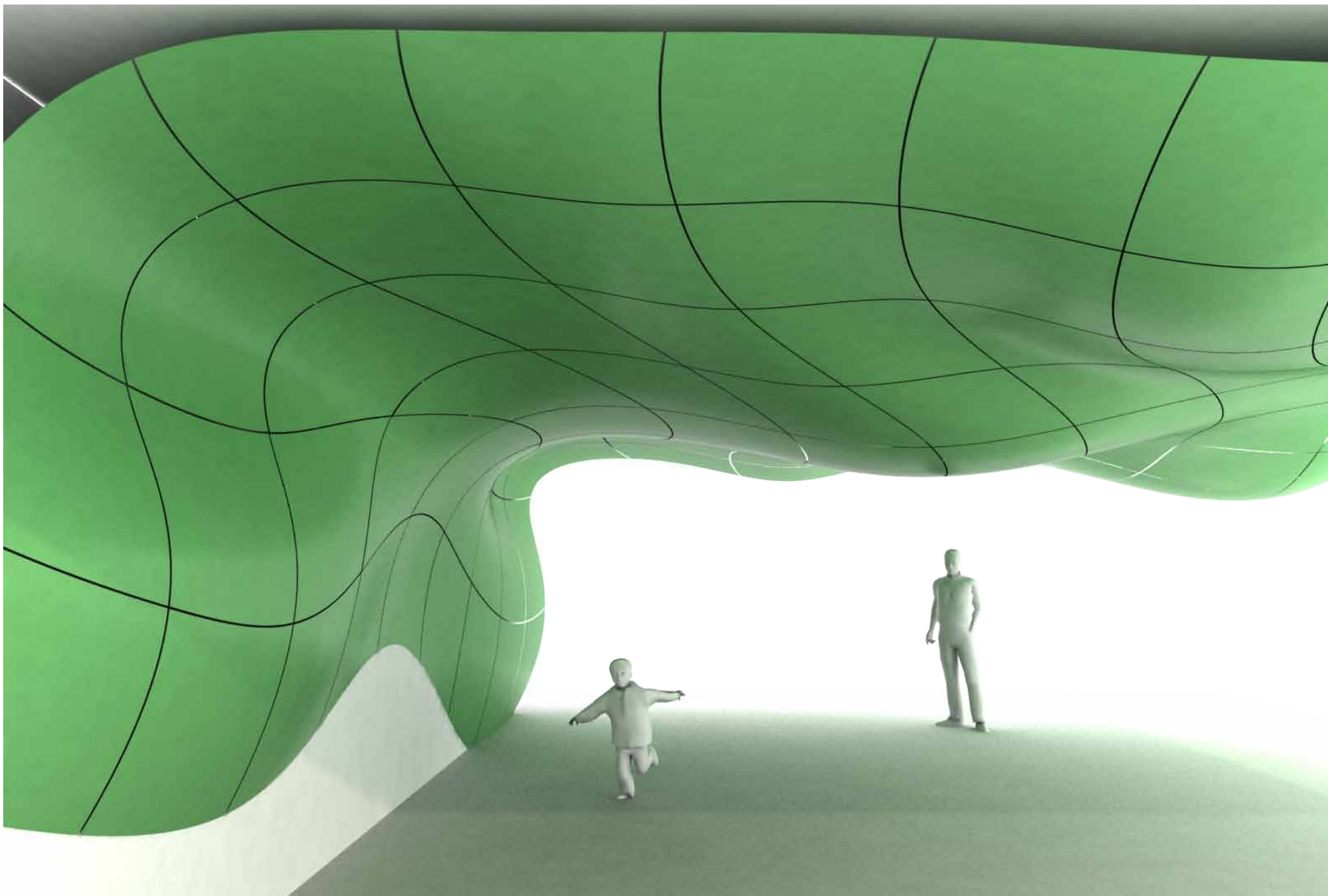
**PÅ MARKEDET
2012**

adapa
adapting architecture

Designfrihed

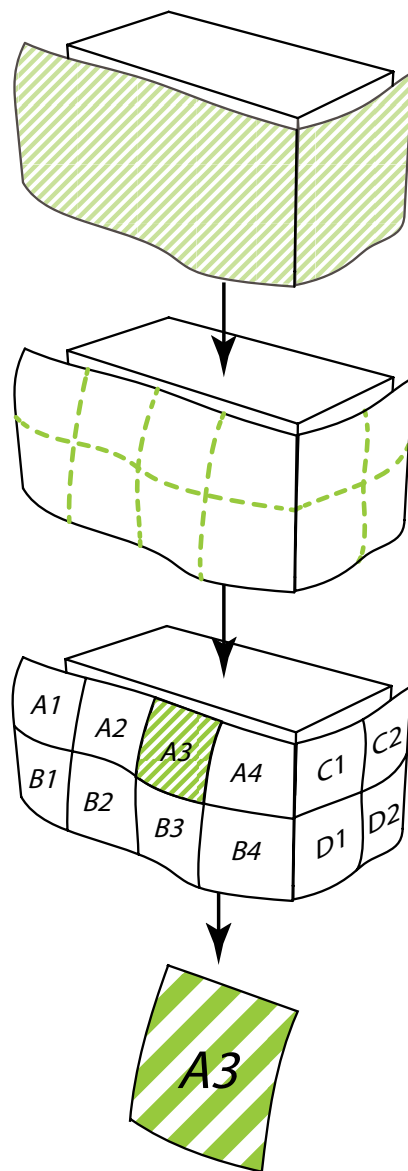
Du former det
- vi laver det





Teknisk ekspertise

Design til produktion



1 Arkitekten afleverer et facadedesign til Adapa

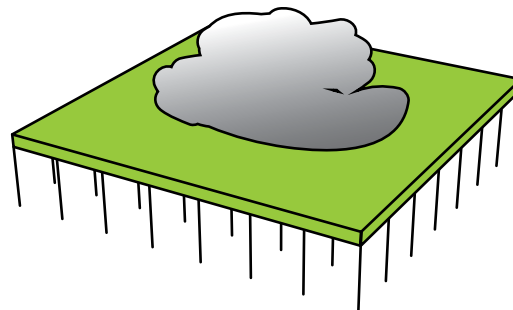
2 Adapa opdeler facaden i moduler

3 Modulerne systematiseres til produktion og logistik

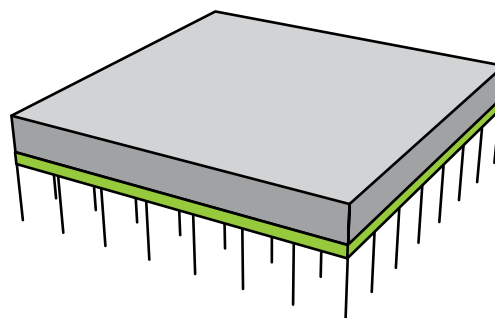
4 Producentpartneren sætter hvert modul i produktion

Unik støbeproces

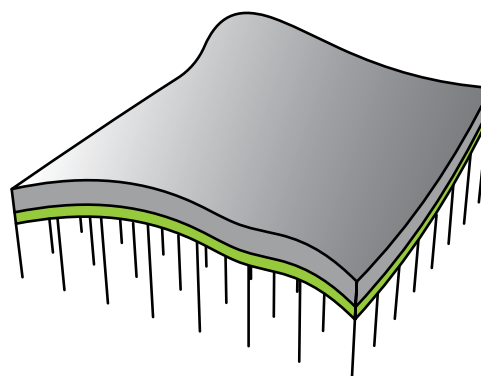
Produktion



1 Materialet lægges på støbeformen



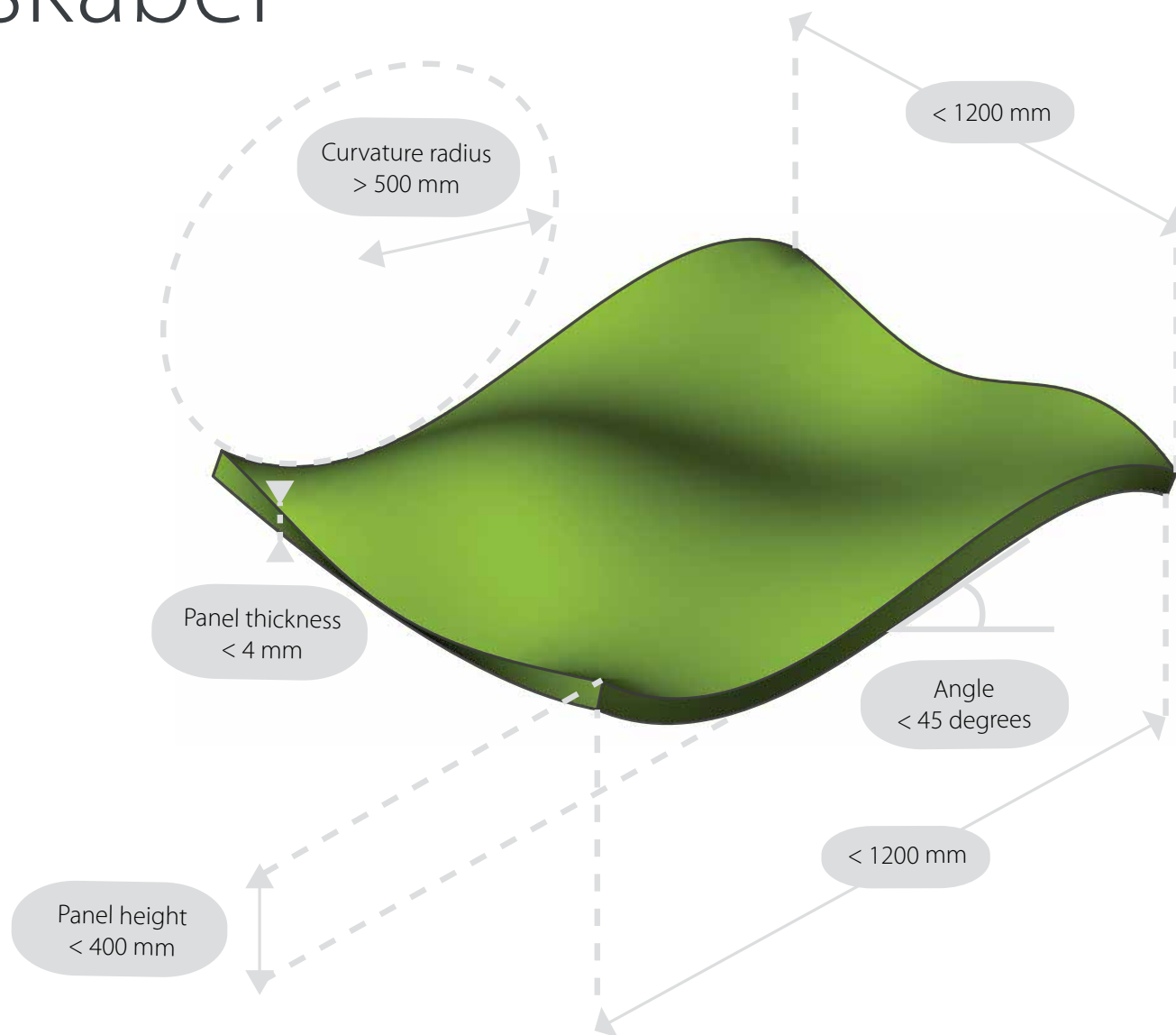
2 Materialet hælder indtil det har fået en stivhed



3 Støbeformen formes som ønsket, og materialet hælder færdigt

Tekniske egenskaber

Facadepaneler



Facadesystem

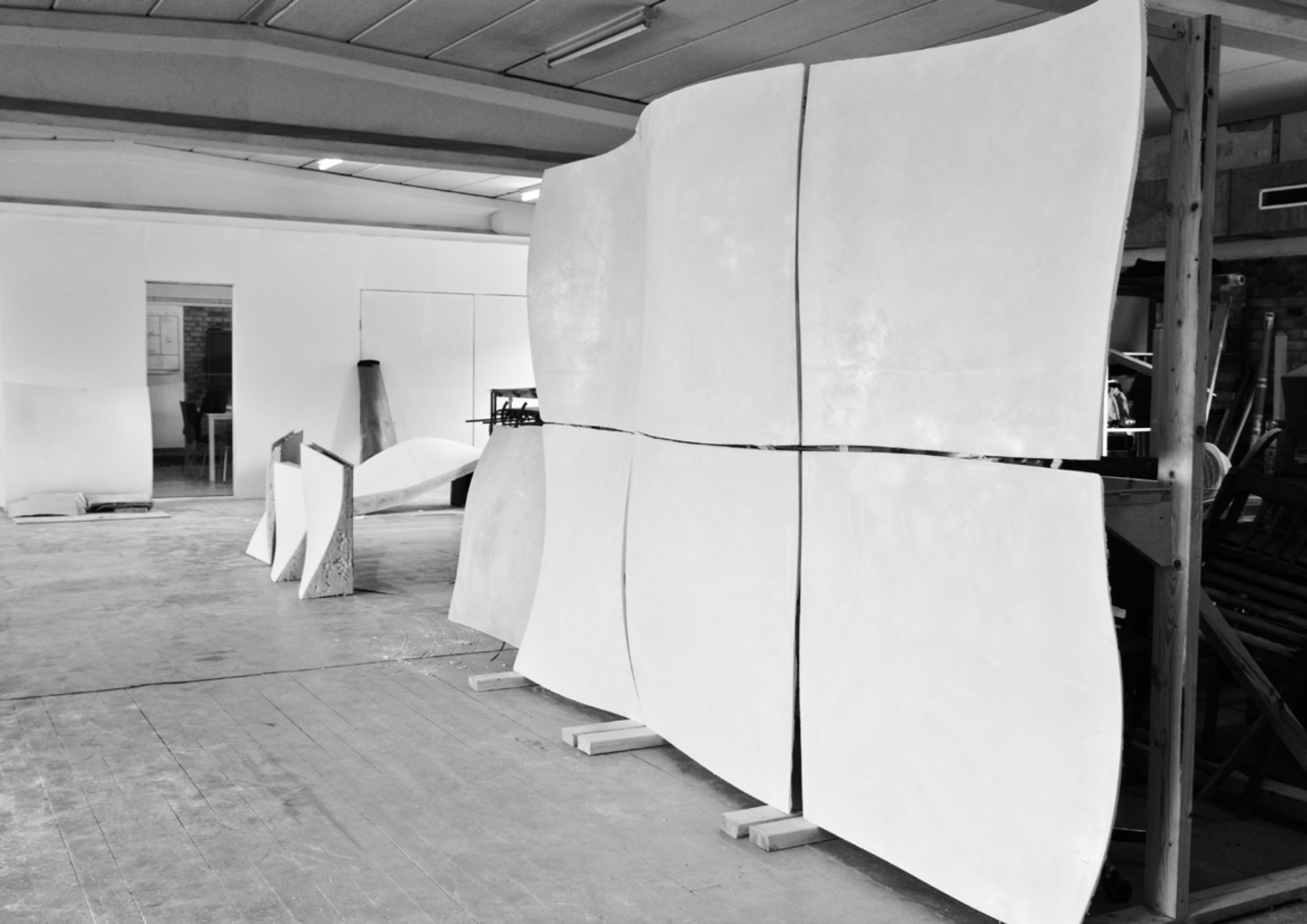
Standardiseret ophængningssystem





Curvay

Film om den dynamiske støbeform









Tak!

Og husk, dobbeltkrumt
er dobbelt så godt!

Christian Raun Jepsen
Administrerende Direktør

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