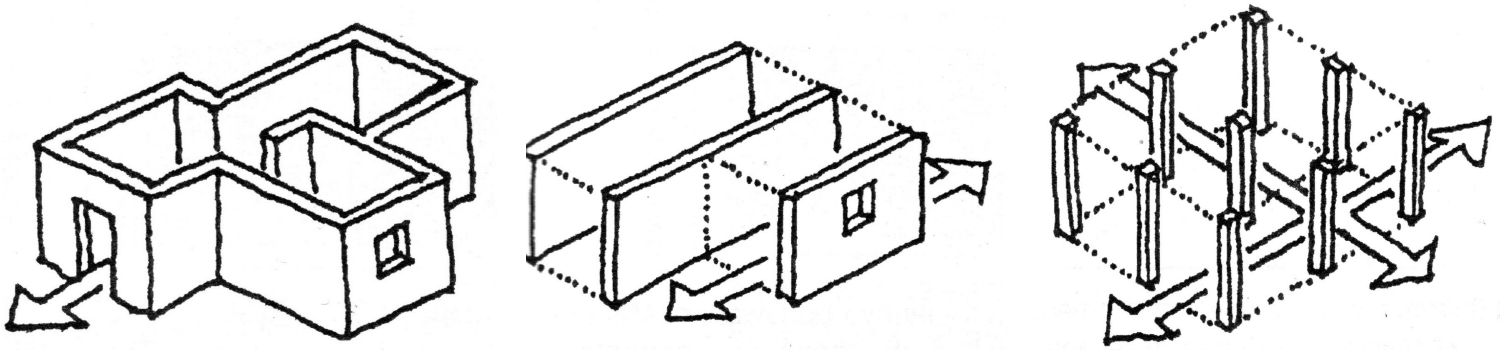
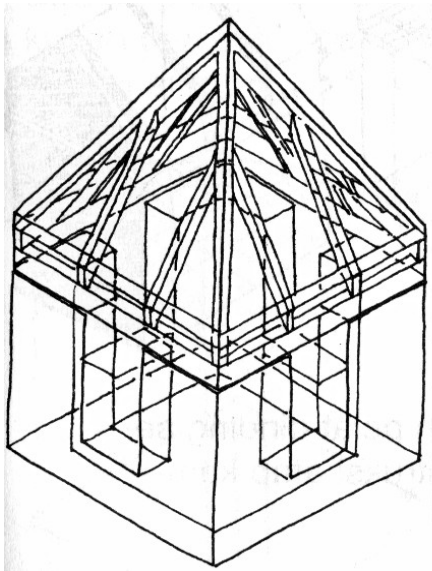
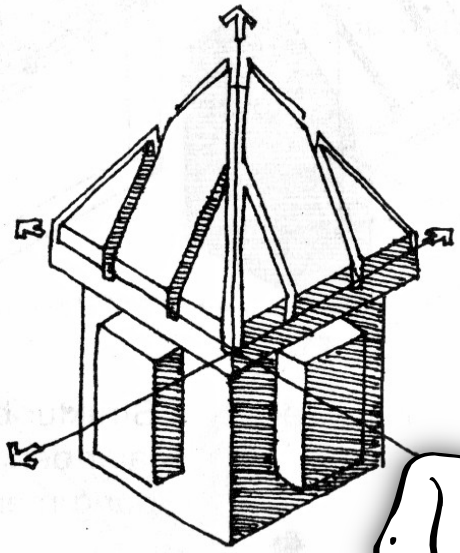
PERENCANAAN TEKNOLOGI & SISTEM BANGUNAN (PTSB) *03*

Determine the structural system!







Literatur : Frick, H., Purwanto, LMF, ***Sistem bentuk struktur bangunan***, Yogyakarta, [illegible] 1996

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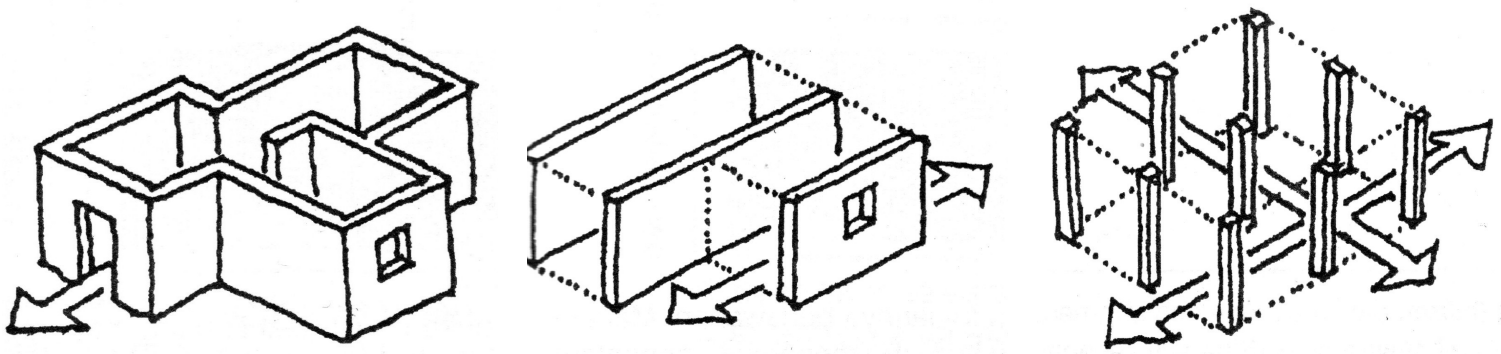
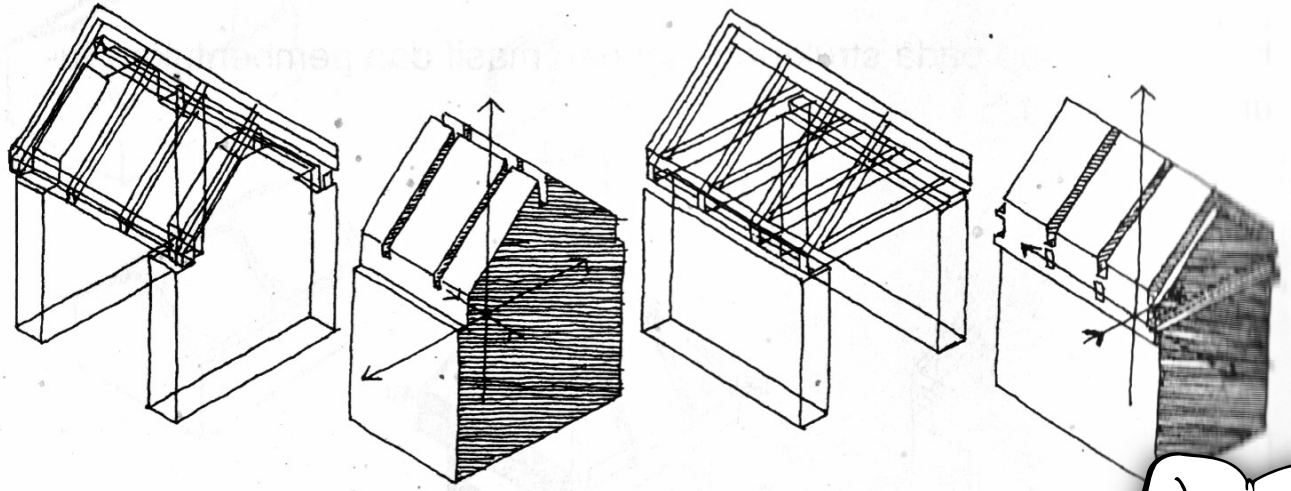
Determine the structural system!





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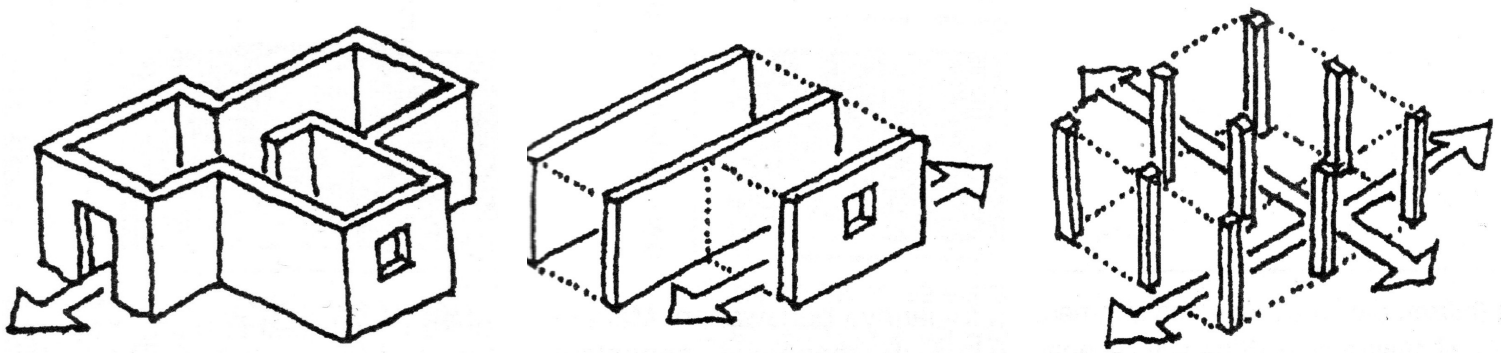

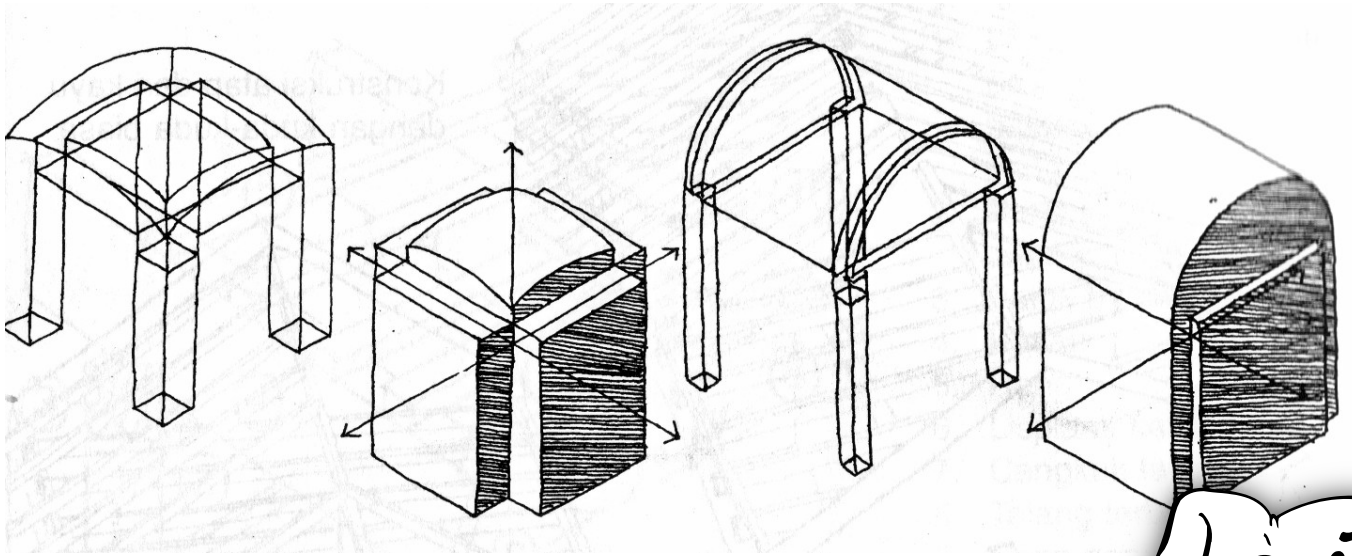

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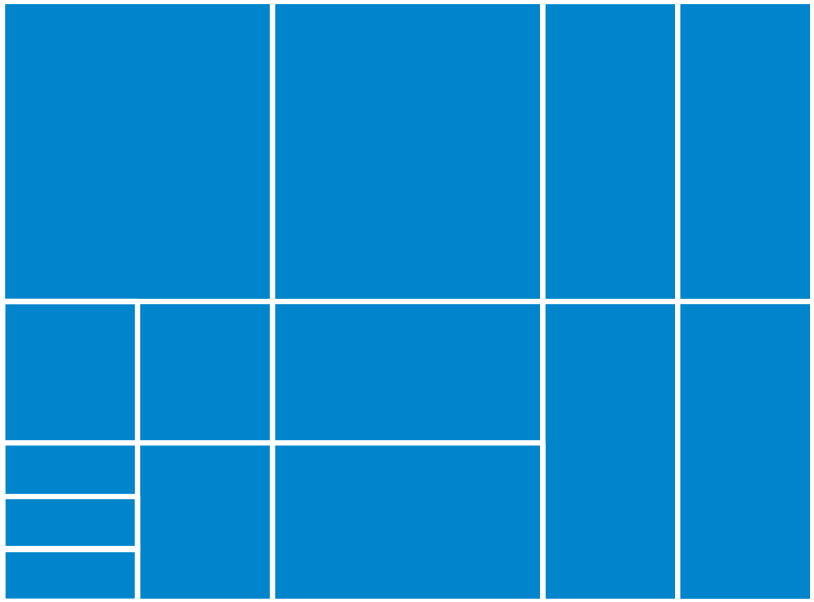
What do you know about MODULE?



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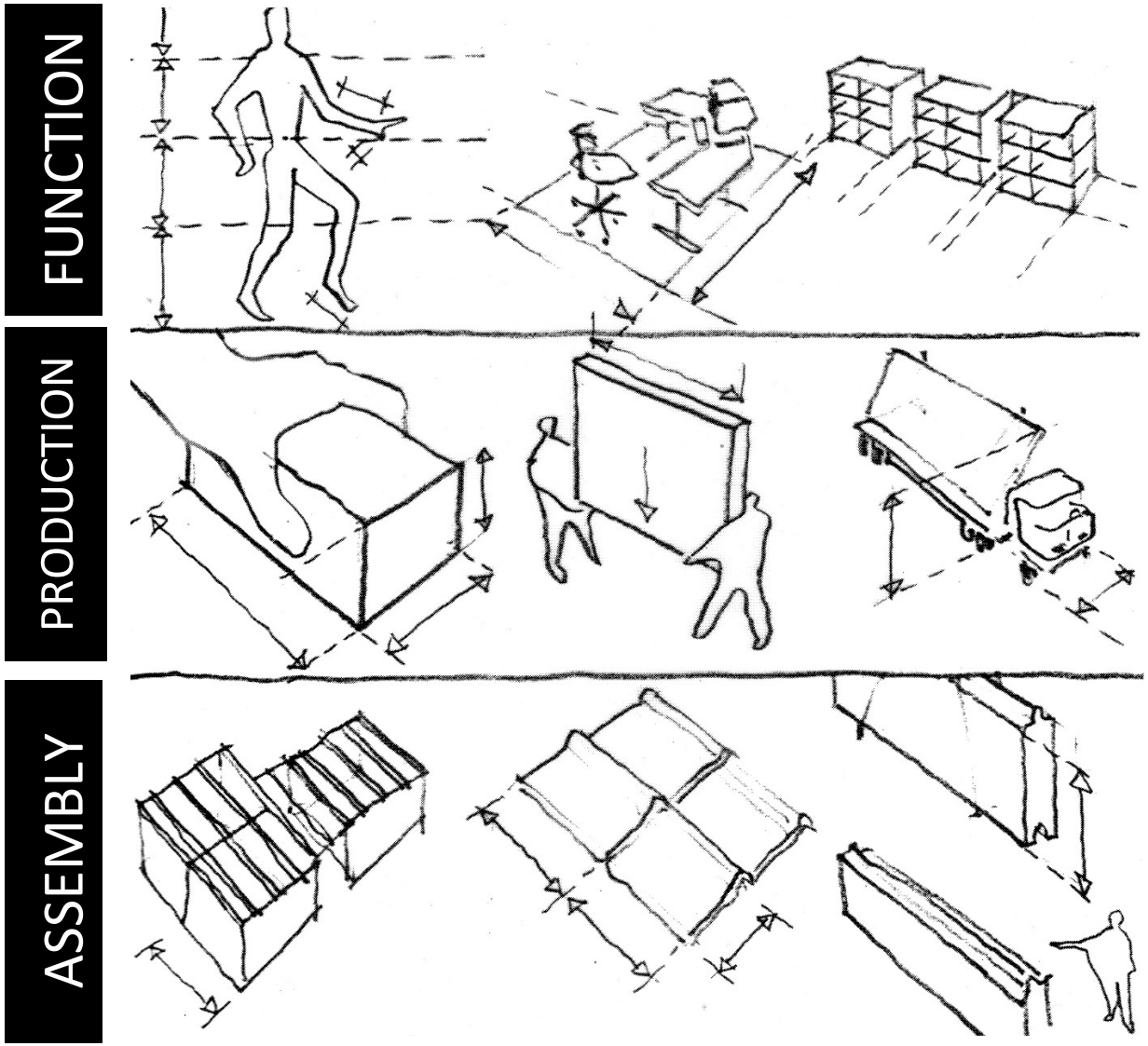
Develop your plan using MODULE!



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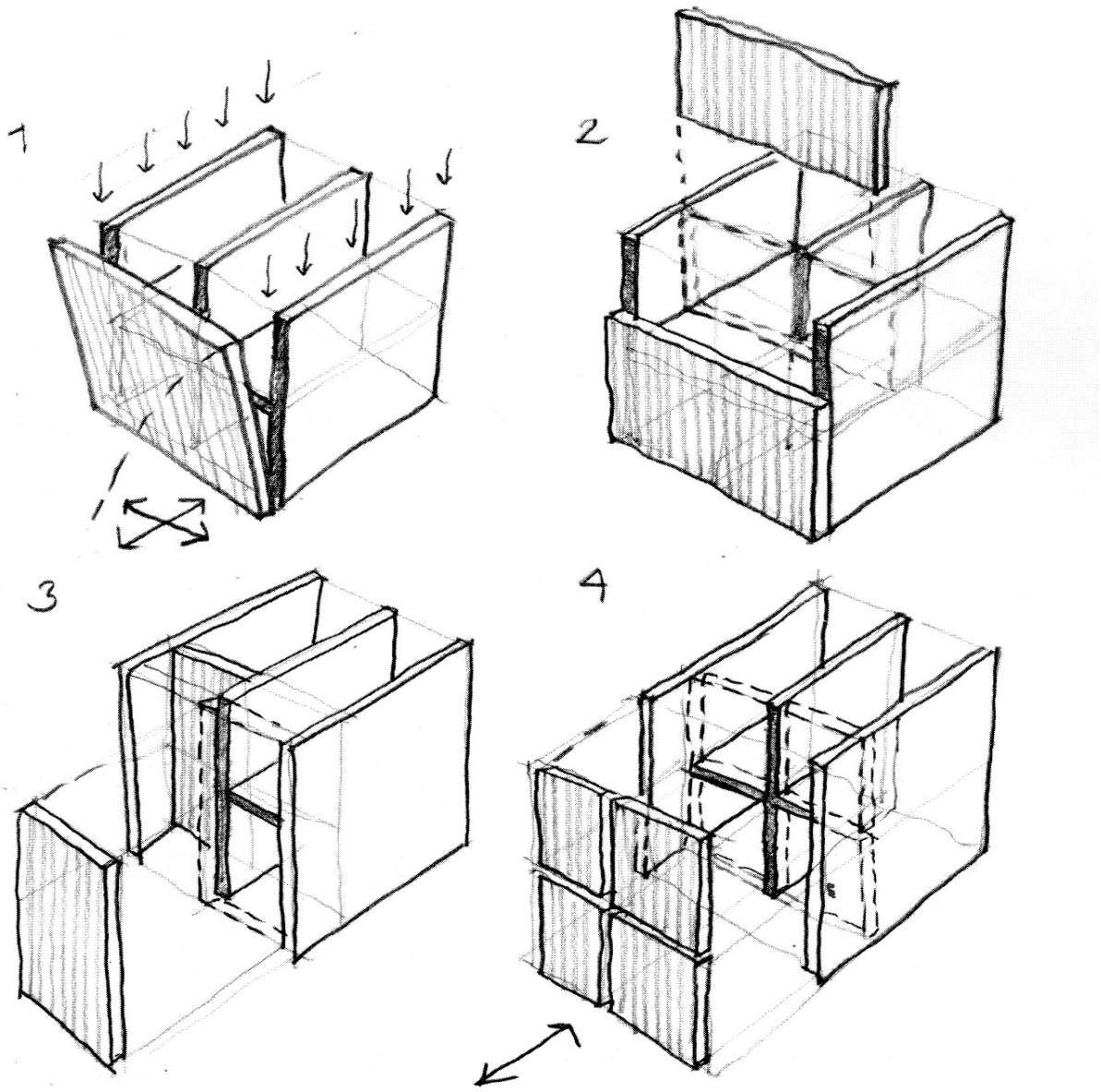

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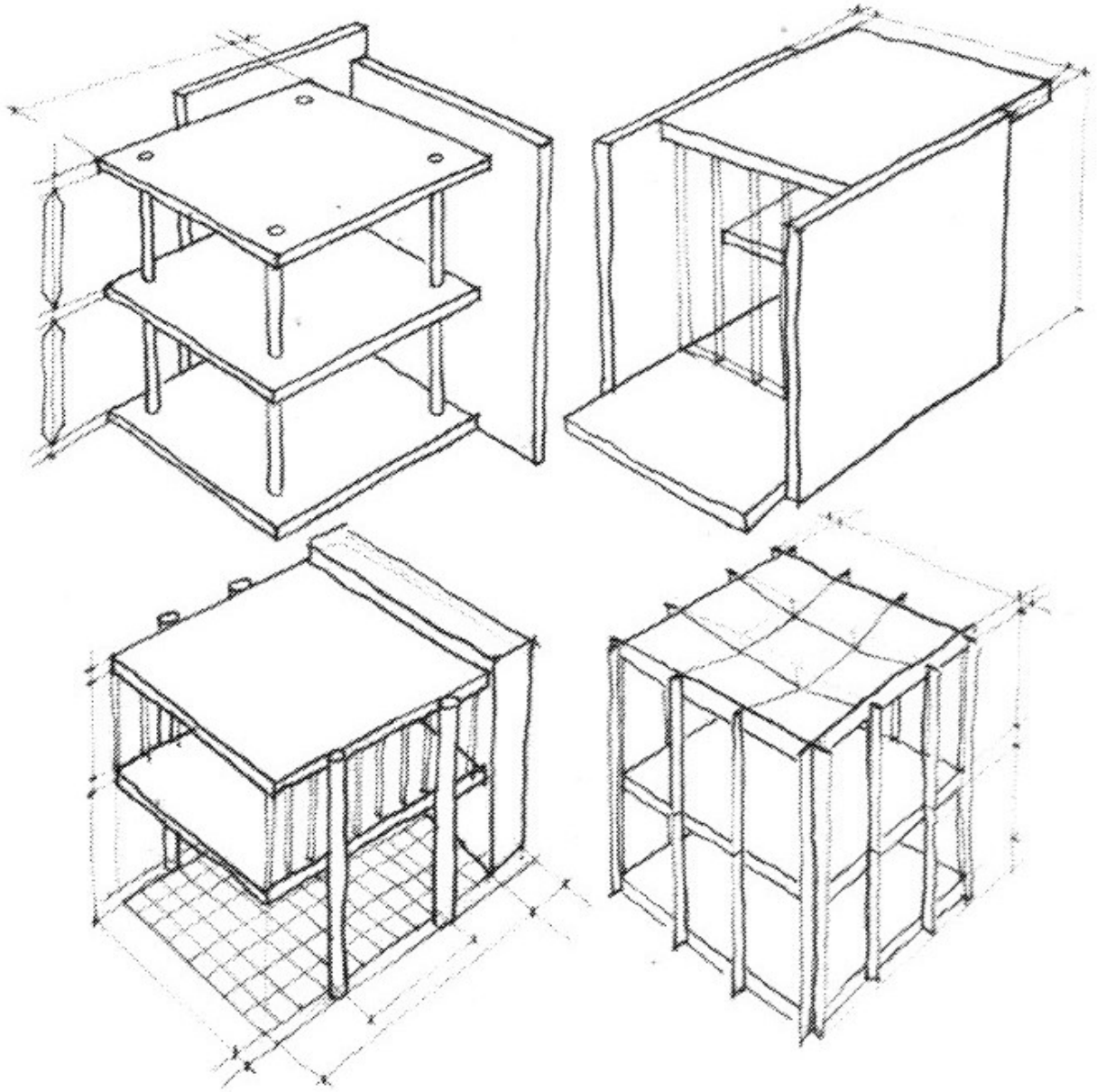

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Step 1: Create the roof shape!

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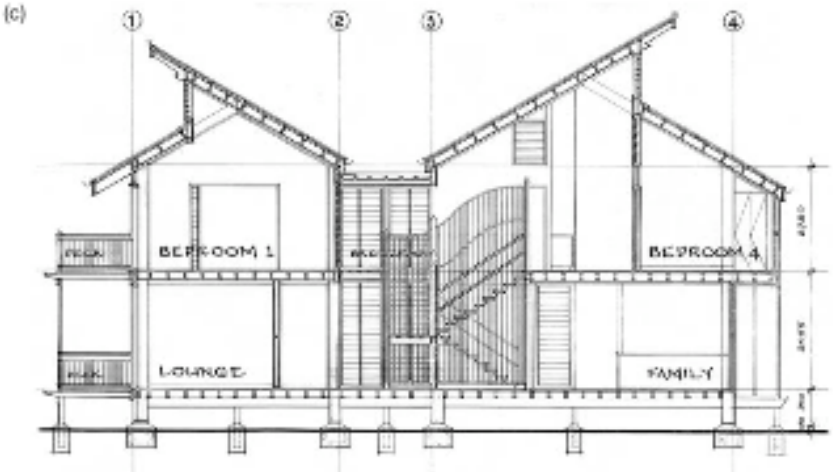

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Step 1: Create the roof shape!

D o i n g C r e a t i v e

Ecopolis Architects Pty Ltd, Adelaide

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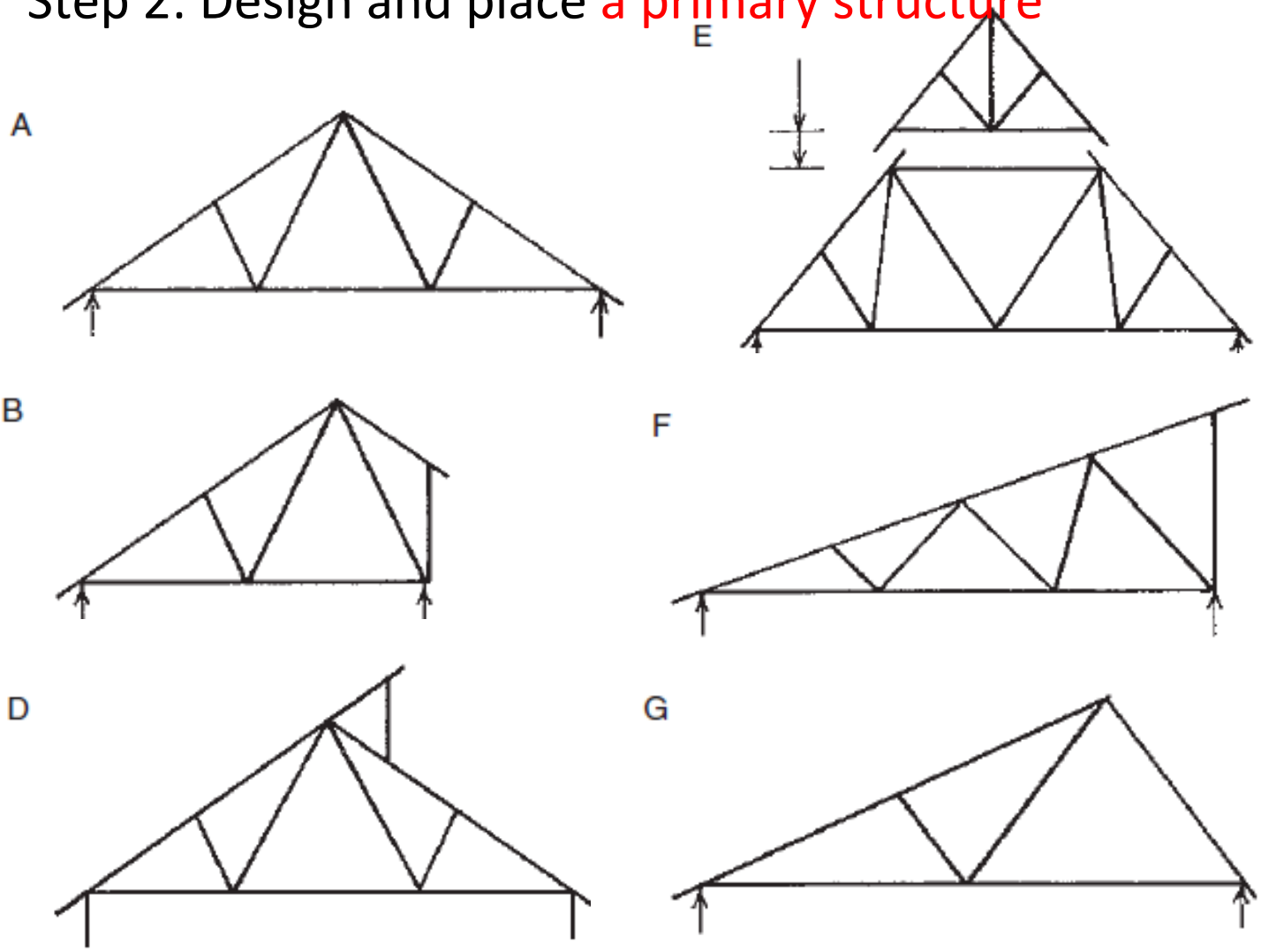
Step 2: Design and place a primary structure



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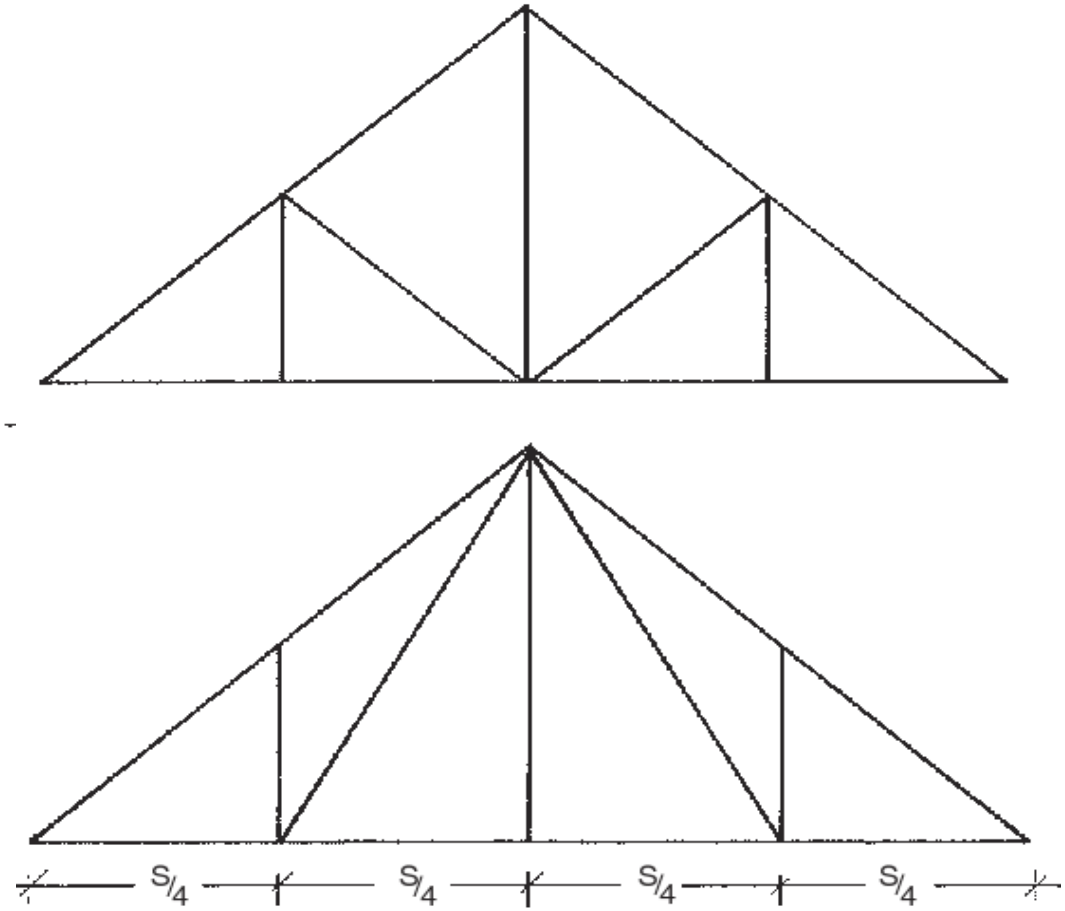
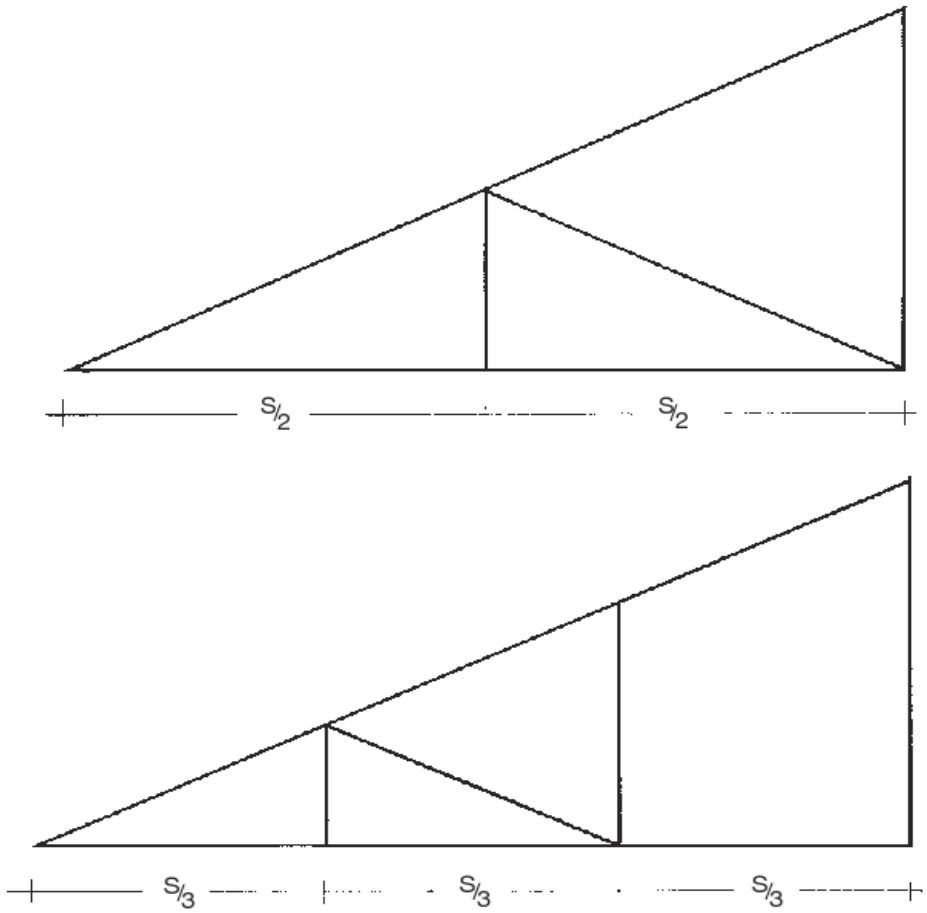


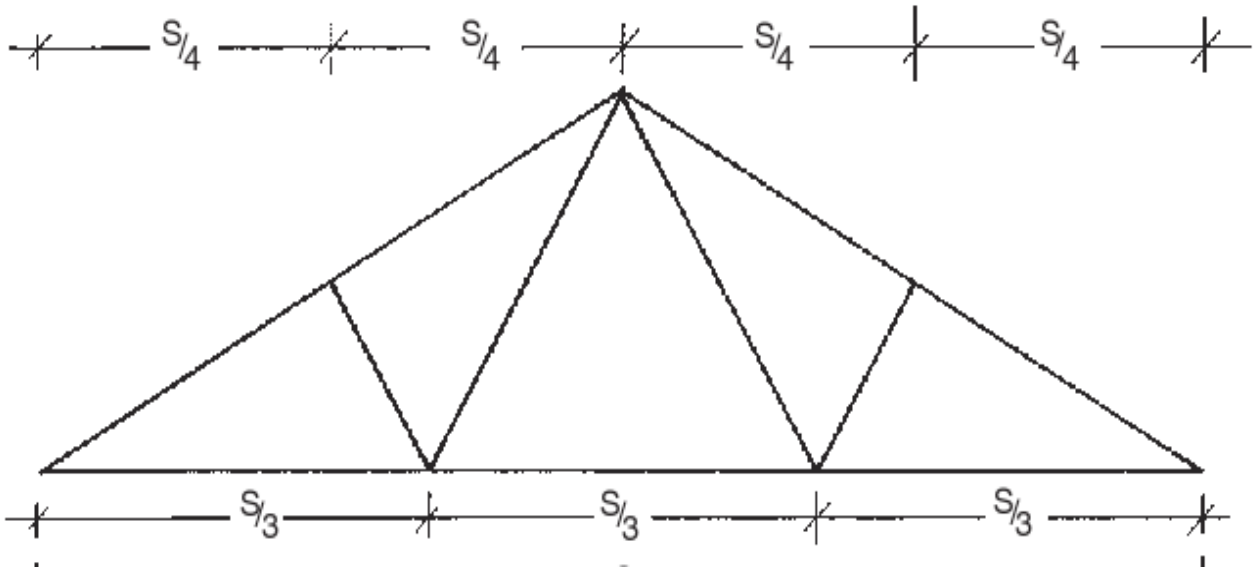
Howe & Fan truss shape

Step 2: Design and place a primary structure



Mono pitch truss shape (2 – 4 m)

Step 2: Design and place a primary structure



Fink truss shape

8 – 9 m

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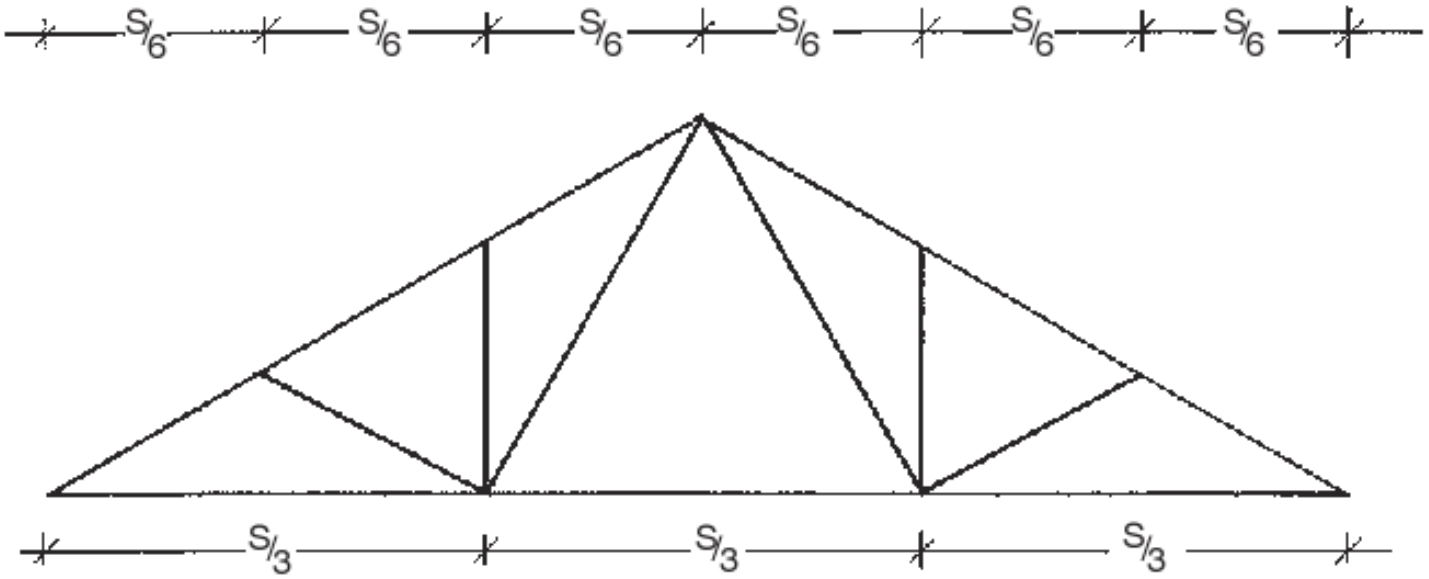

Fan truss shape

8 – 9 m

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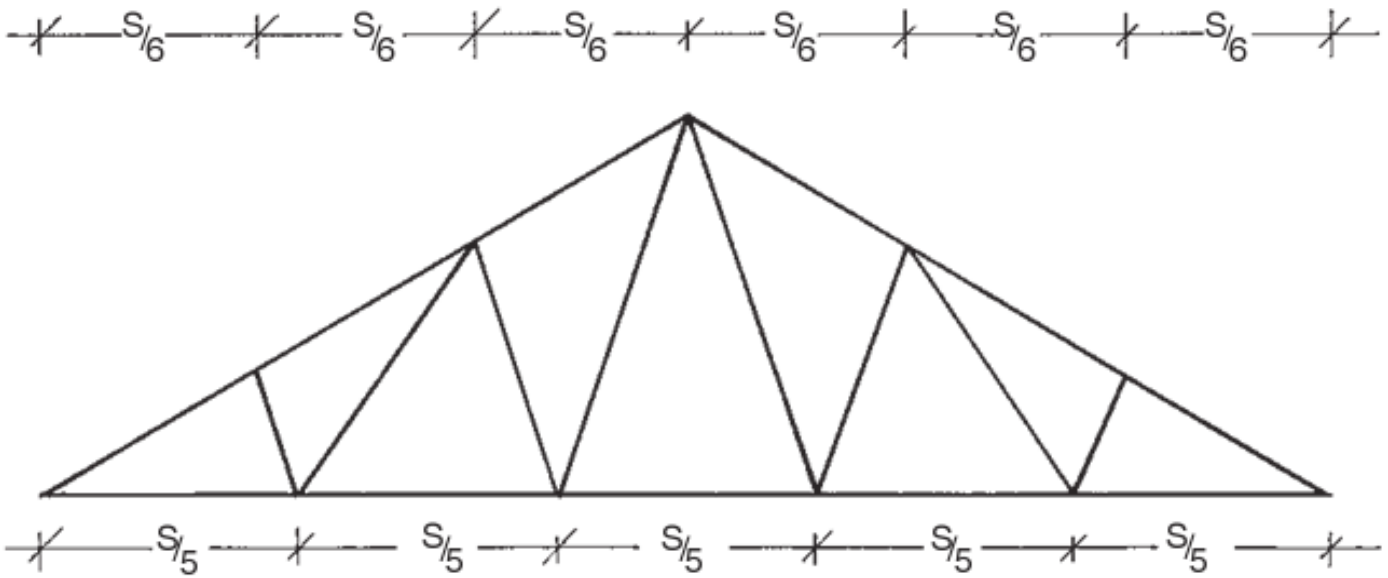

Double "W" truss shape

> 14 m

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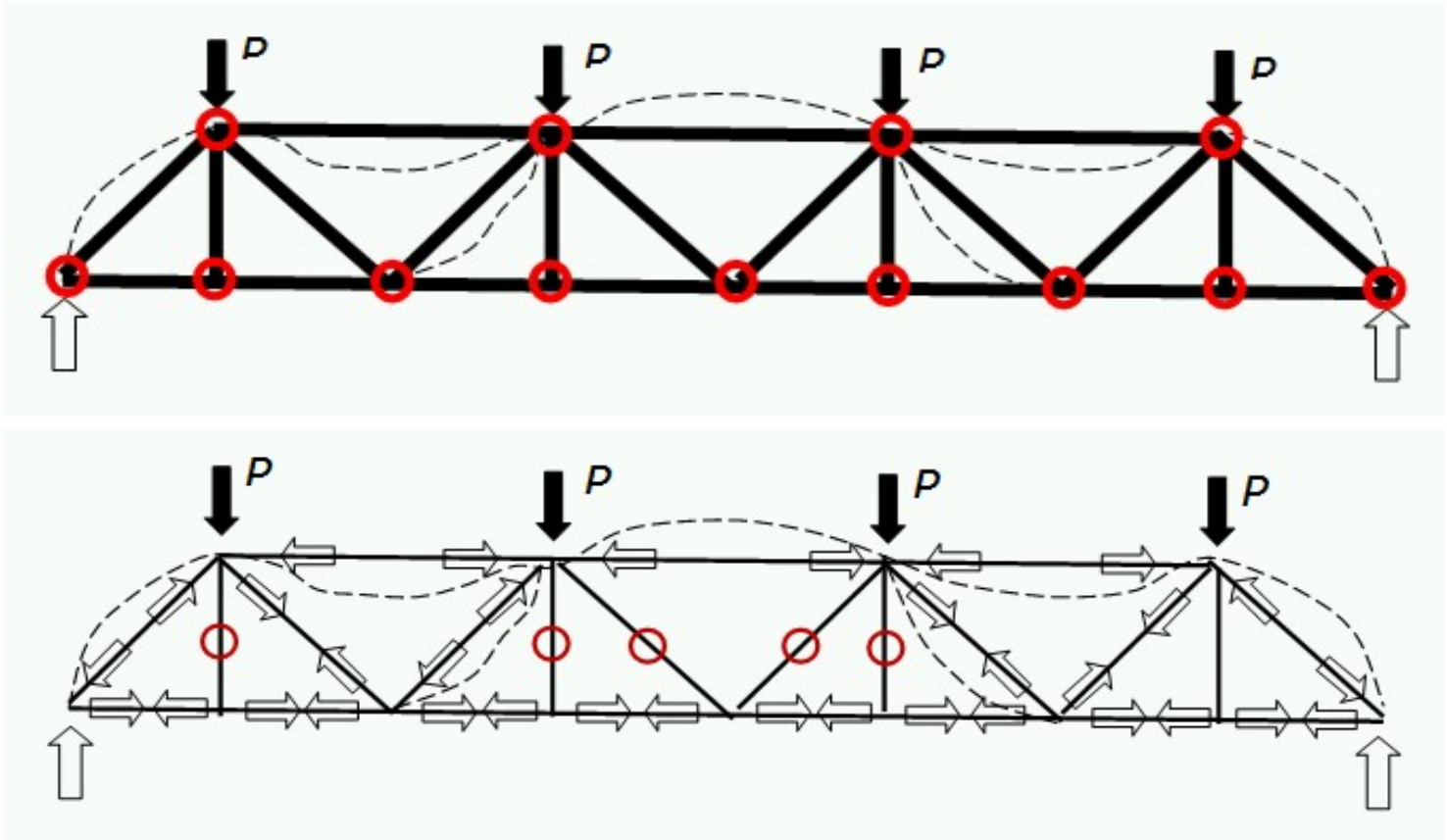

Literatur : Schodek, D.L, S***truktur*** , Bandung,Refika Aditama, 1998 (*terjemahan)*

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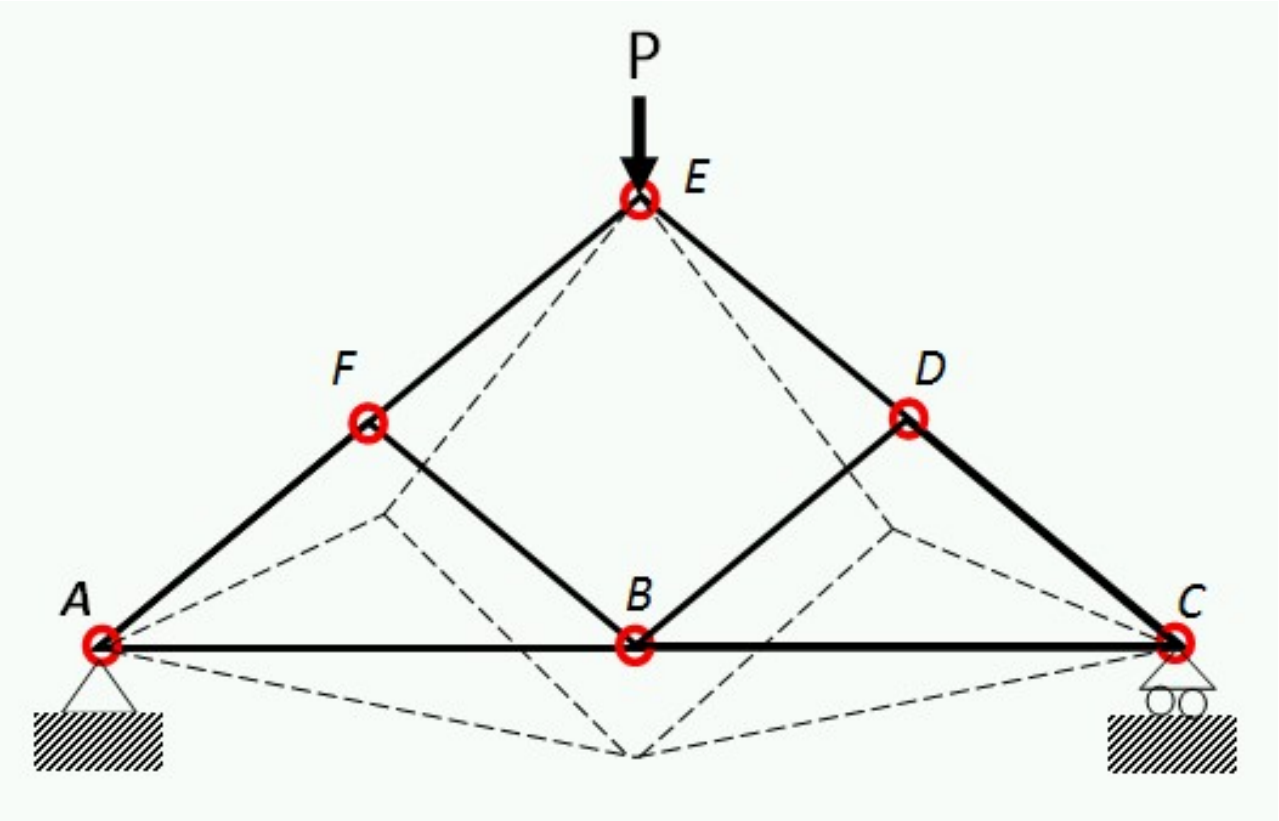

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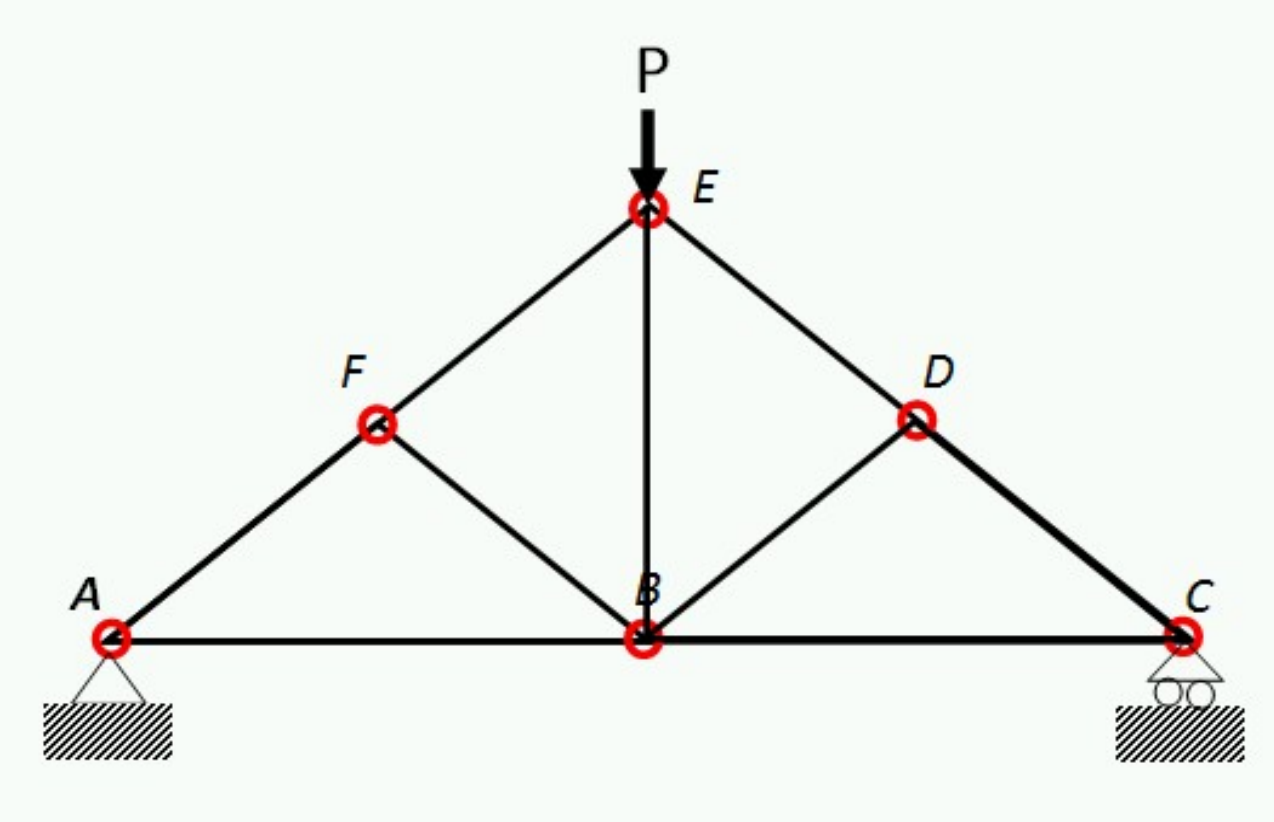

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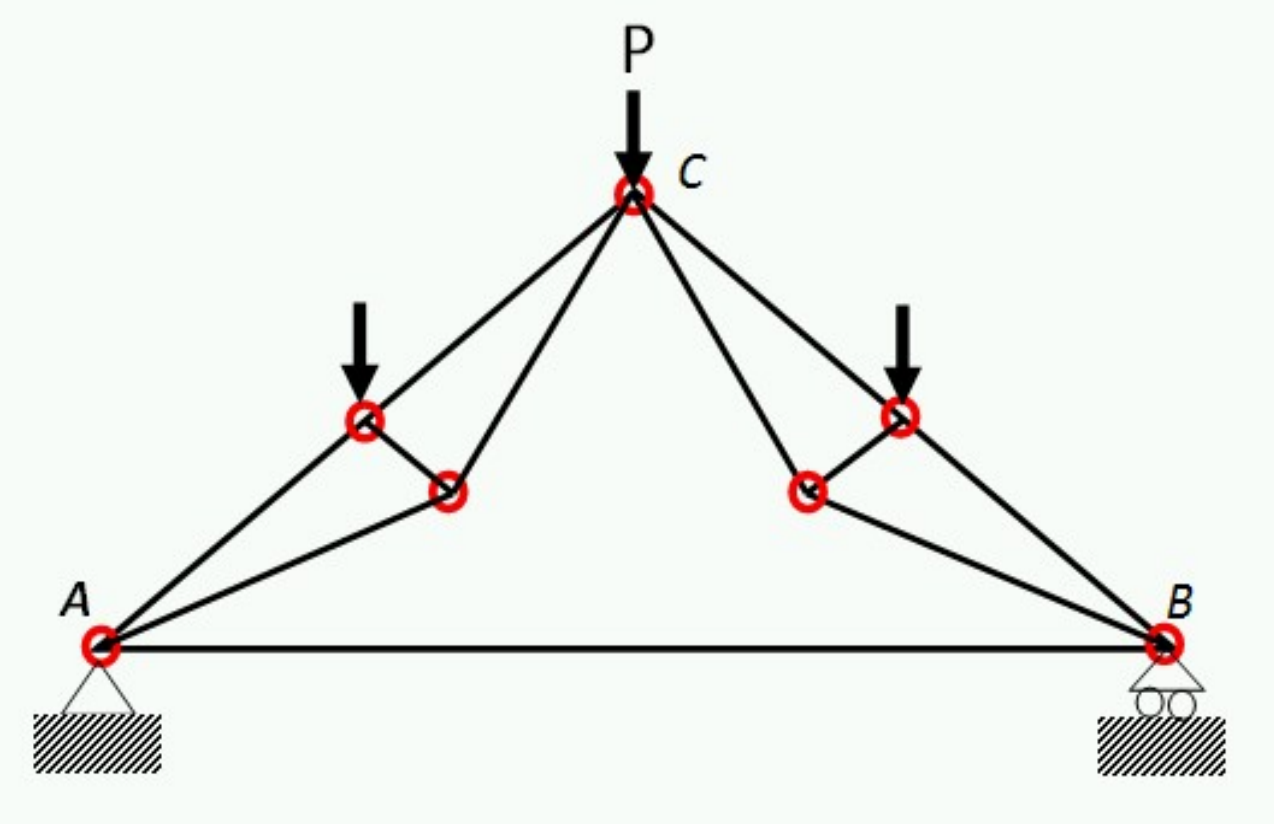

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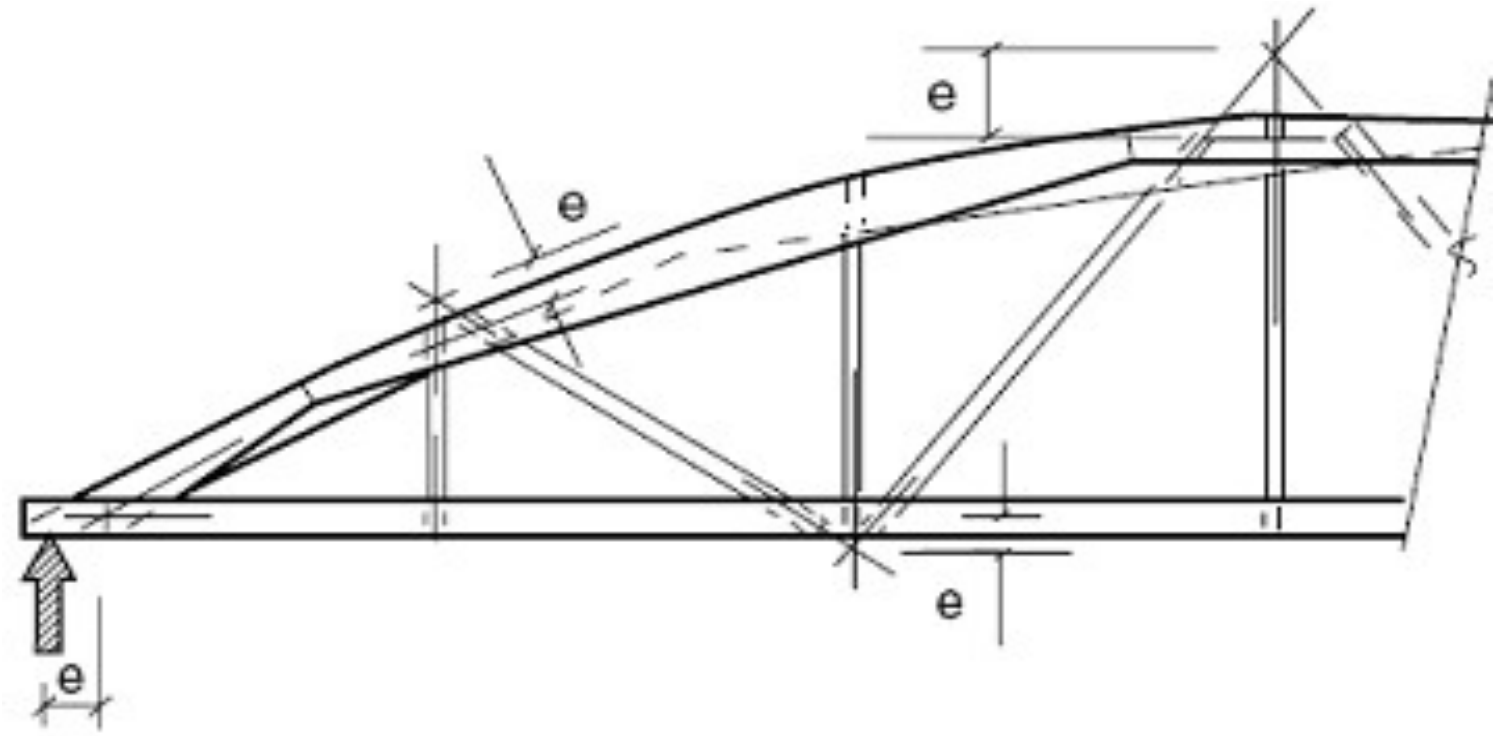
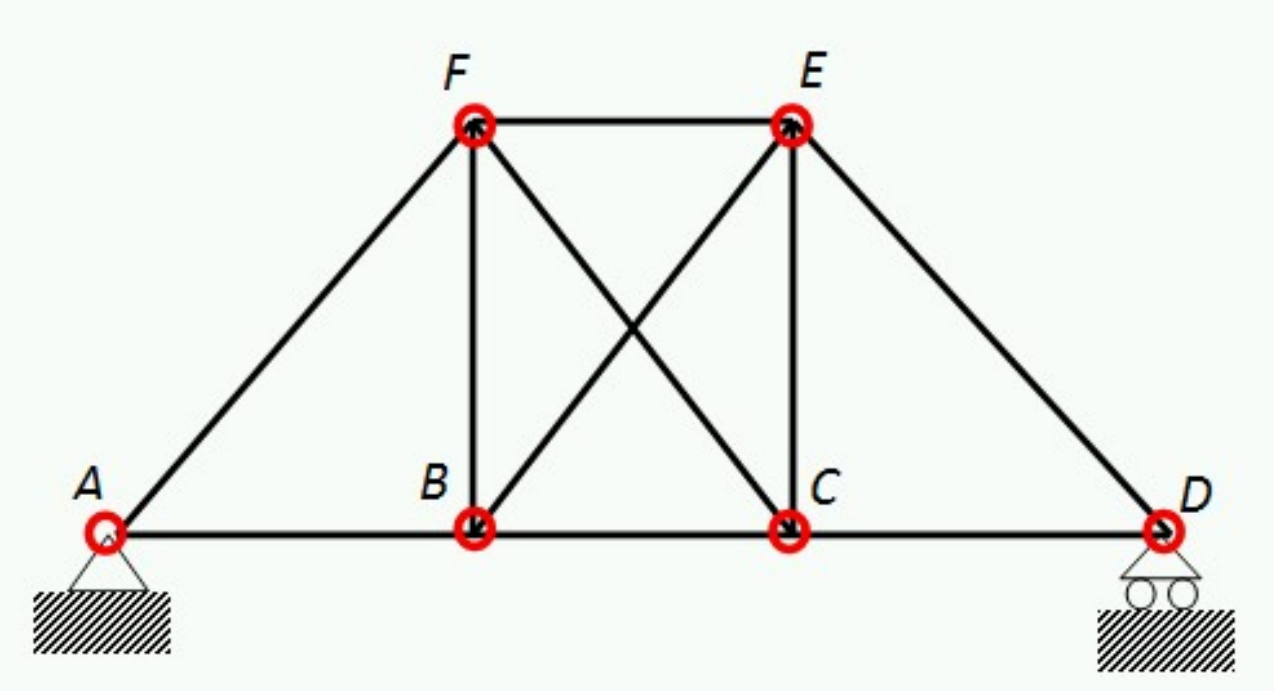


(1) centroid intersection of heel members are **eccentric with truss reaction**

(2) centroid intersection of adjacent web members are eccentric with chords.

Step 2: Design and place a primary structure



$$n = 2j - 3$$

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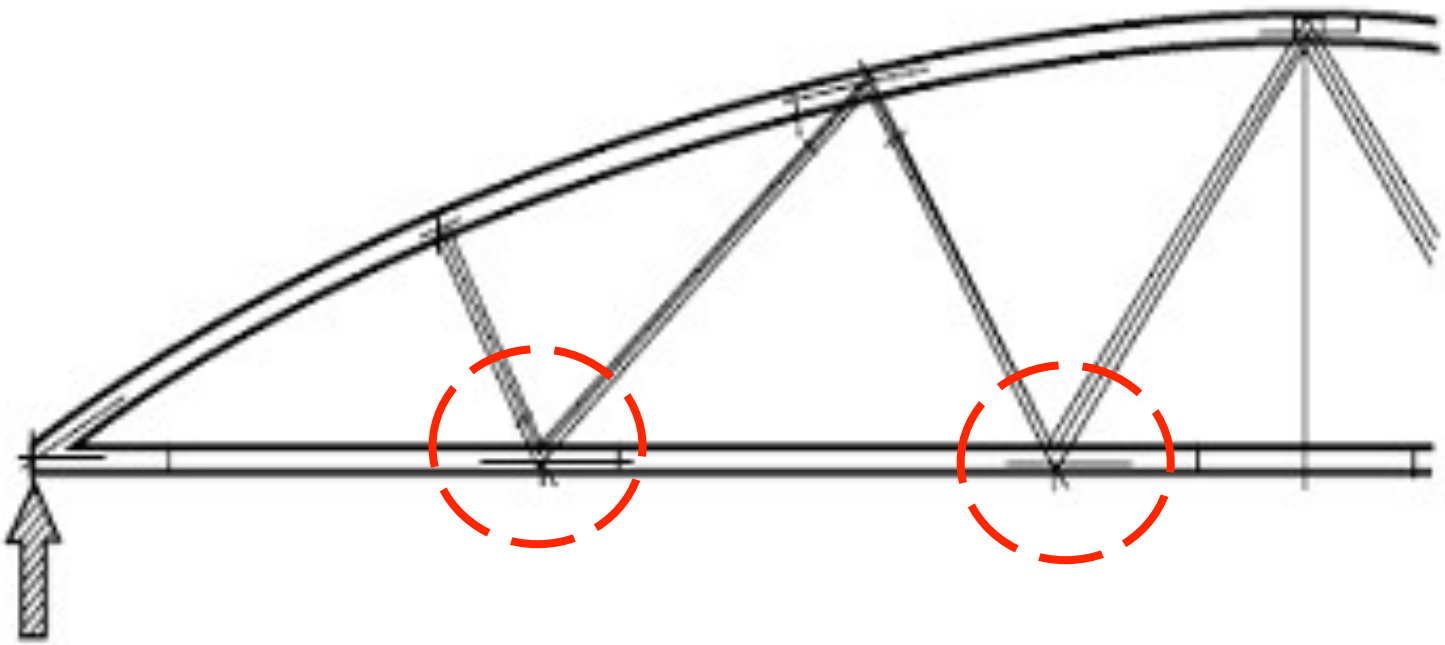
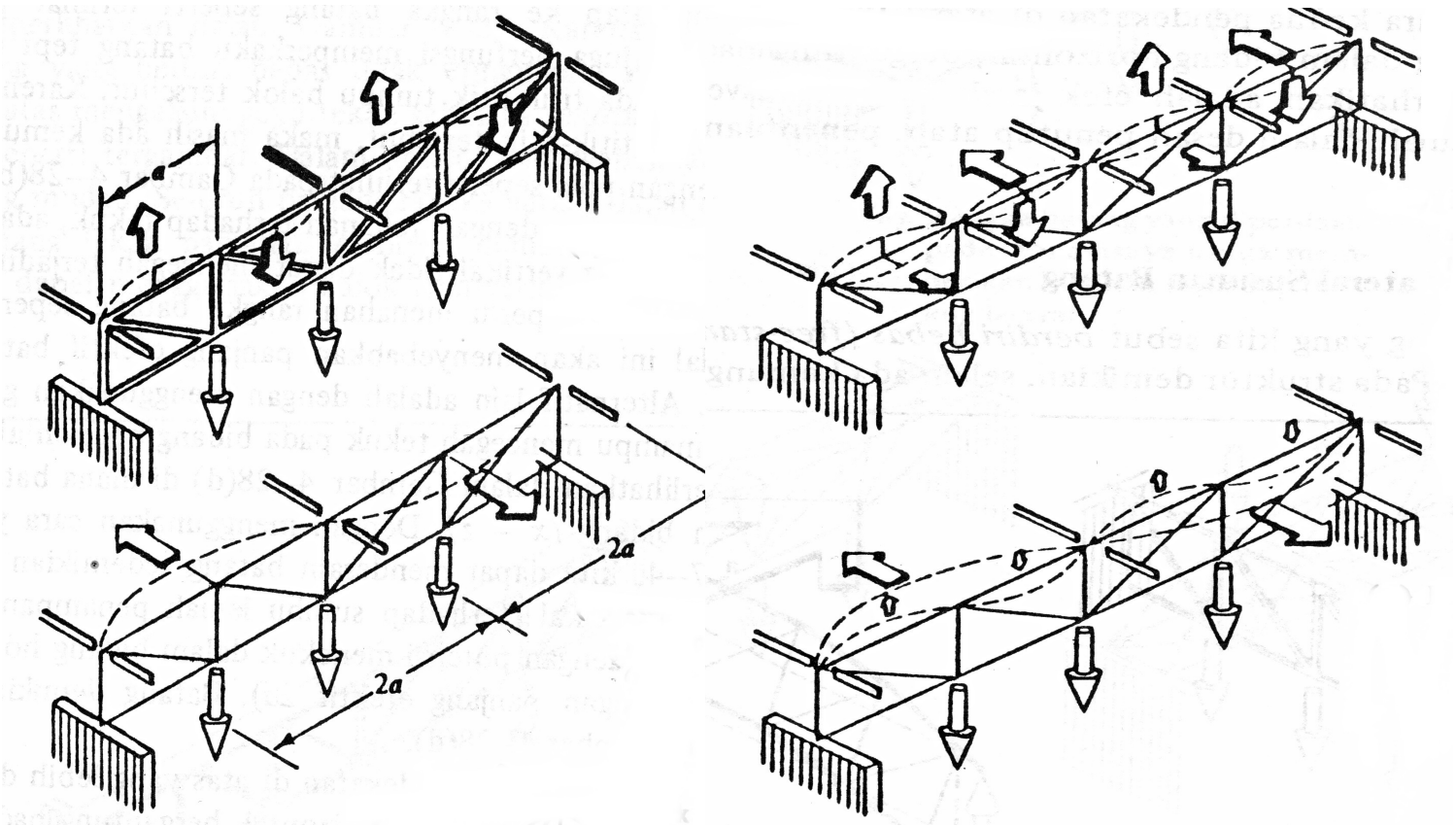


Centroid intersection of adjacent web members are concentric with chords and where centroid intersection of heel members are concentric with truss reaction.



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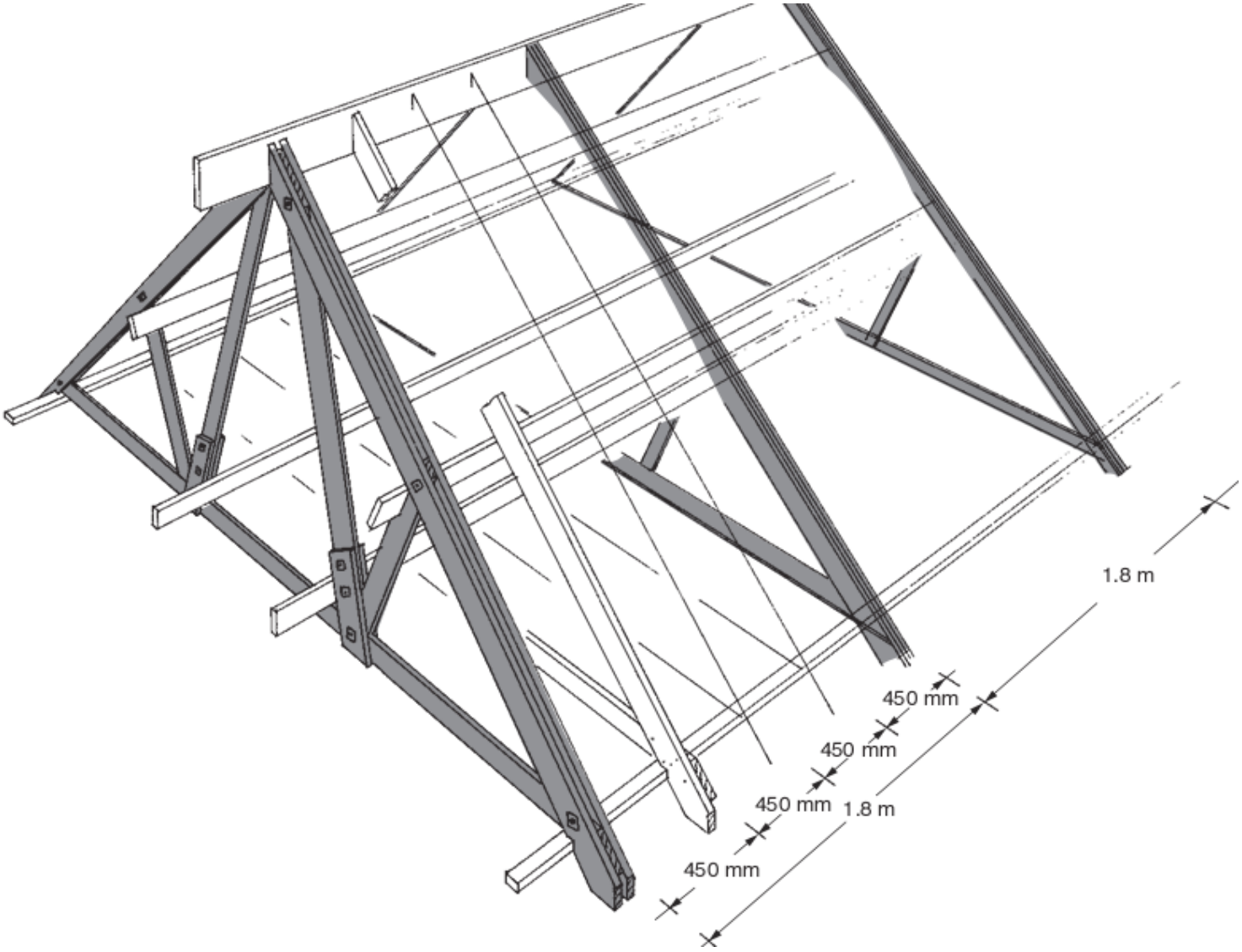

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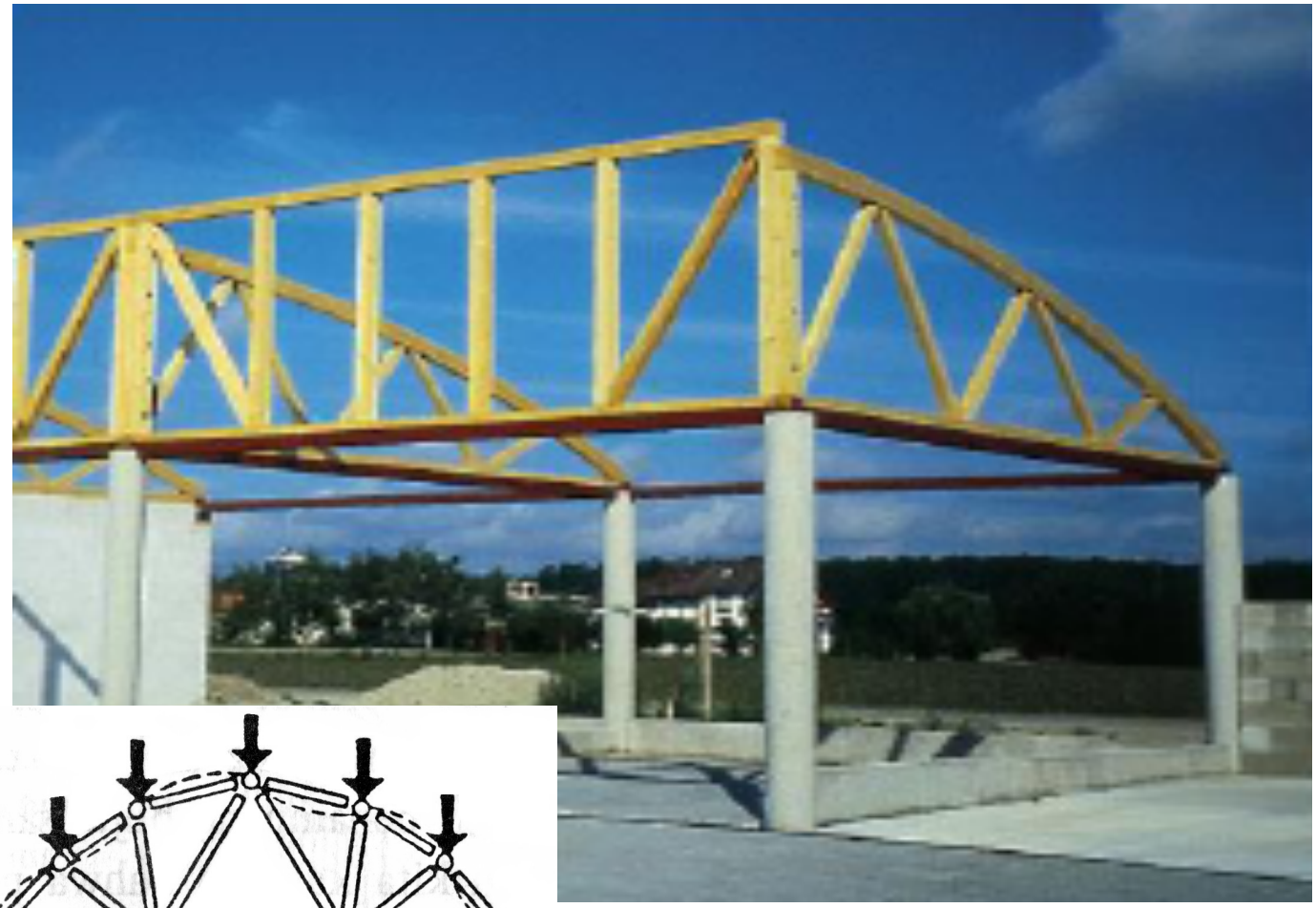

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*Source: Frey, H., et.al, **Bautechnik**, Haan-Gruiten, Verlag Europa-Lehrmittel, 2002*

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