



# INDUSTRIJA

# Sistemi konstrukcije

- tipovi sistema koje susrećemo kod niskih hala:
  - linijski sistemi (skeletni i okvirni)
  - linijski prostorni sistemi (razne rešetke)
  - nabori
  - prostorno-površinski (prostorne rešetke)
  - membrane, ljuske
  - viseći
- materijali koji se koriste, zavise od industrije gde se primenjuju:
  - beton i prednapregnuti beton
  - čelik
  - aluminijum
  - drvo
  - platno

# Linijski sistemi (skeletni i okvirni)

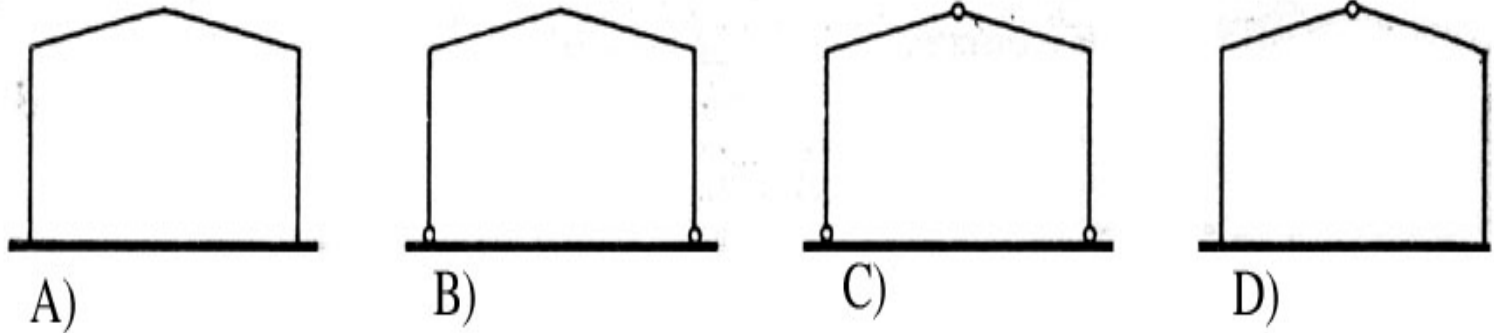
## ● skeletni sistemi

- najjednostavniji linijski sistem koji se sastoji od greda, stubova i ukrućenja u upravnom pravcu na pravac nošenja
- ako se radi o manjim rasponima koriste se čelične i betonske grede
- ako se radi o većim rasponima grede su od prednapregnutog betona ili razne vrste rešetki (oblici rešetki su različiti: klasične rešetke, I nosači, olakšani I nosači, virandelovi nosači, kolenasti nosači, nosači sa zategom itd.)
- ekonomični rasponi za drvene elemente i R-vezače su do 15m
- ekonomični rasponi za Aluminijumske i I nosače su do 25m
- ekonomični rasponi za rešetke su i do 100m

## ● okvirni sistemi (važi slično što i za skeletne sisteme)

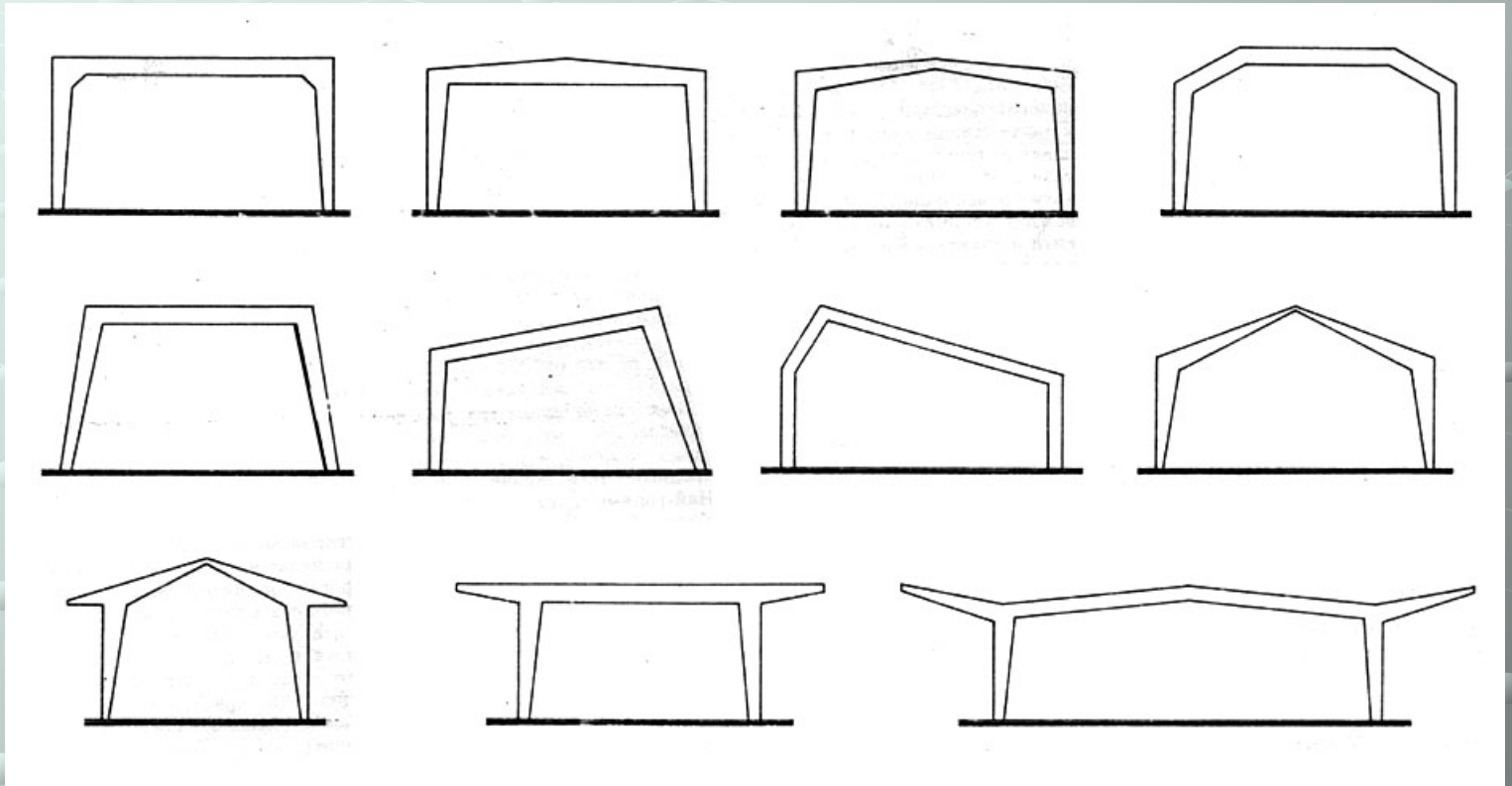
- prizemni okviri o kakvima je ovde reč rade se (u zavisnosti od pravca pružanja nosećih elemenata) kao :
  - podužni i
  - poprečni
- javljaju se kao :
  - jednobrodni i
  - višebrodni objekti
- mogu biti:
  - dvozglojni (ekonomični do 40-50m)
  - trozglojni i do 150m

# OKVIRNI SISTEMI



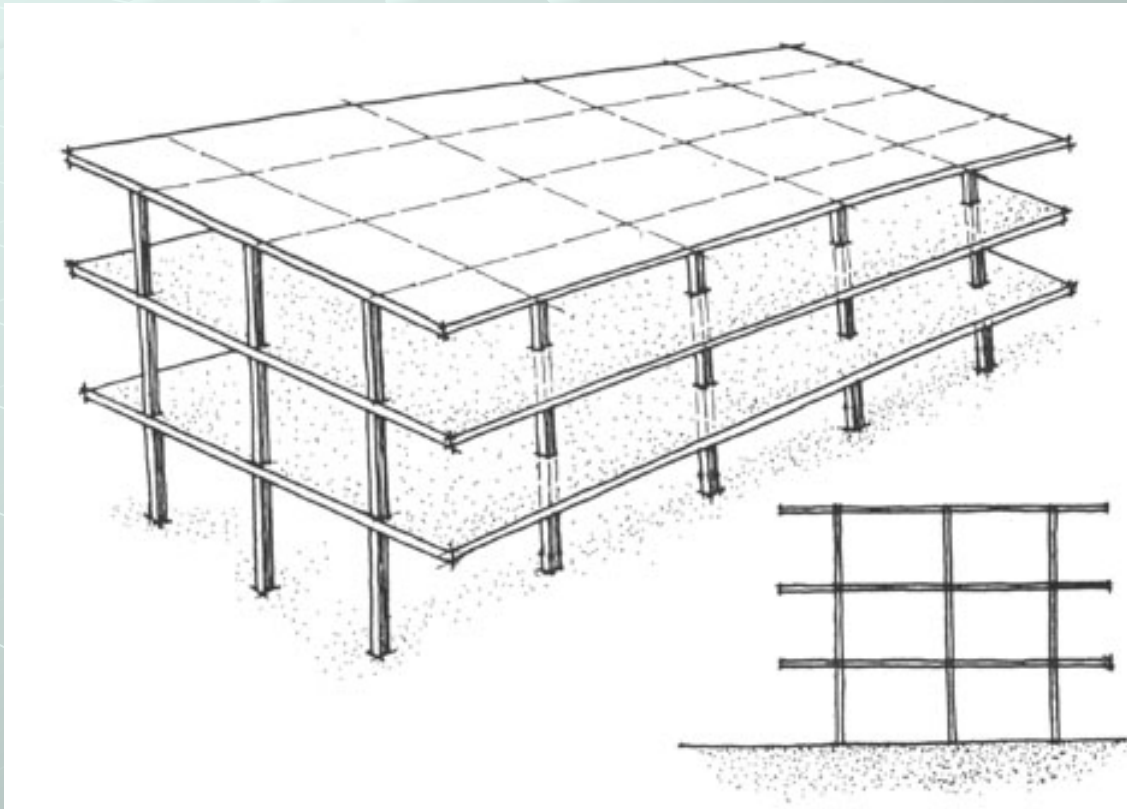
● Statičke šeme okvirnih sistema

# OKVIRNI SISTEMI



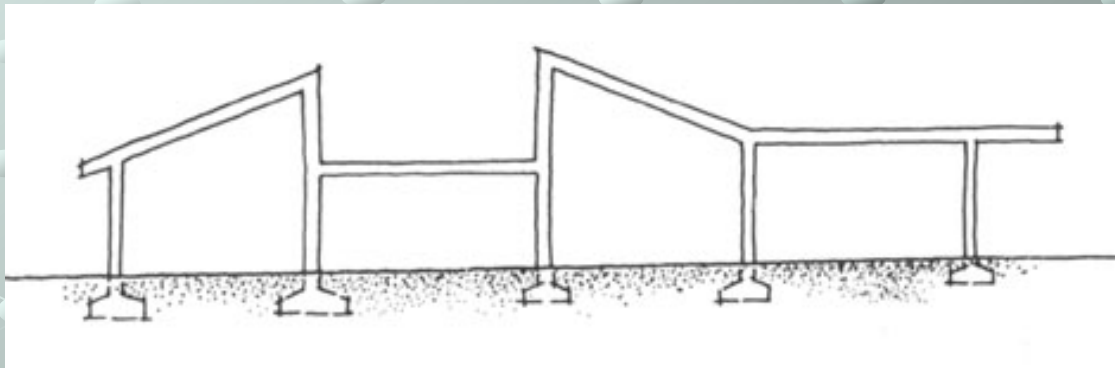
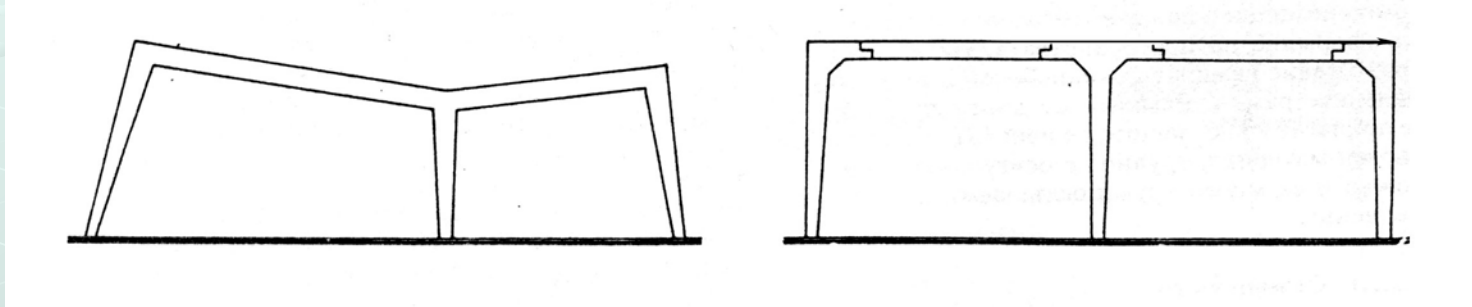
- Konstruktivne šeme poprečnih okvira

# OKVIRNI SISTEMI



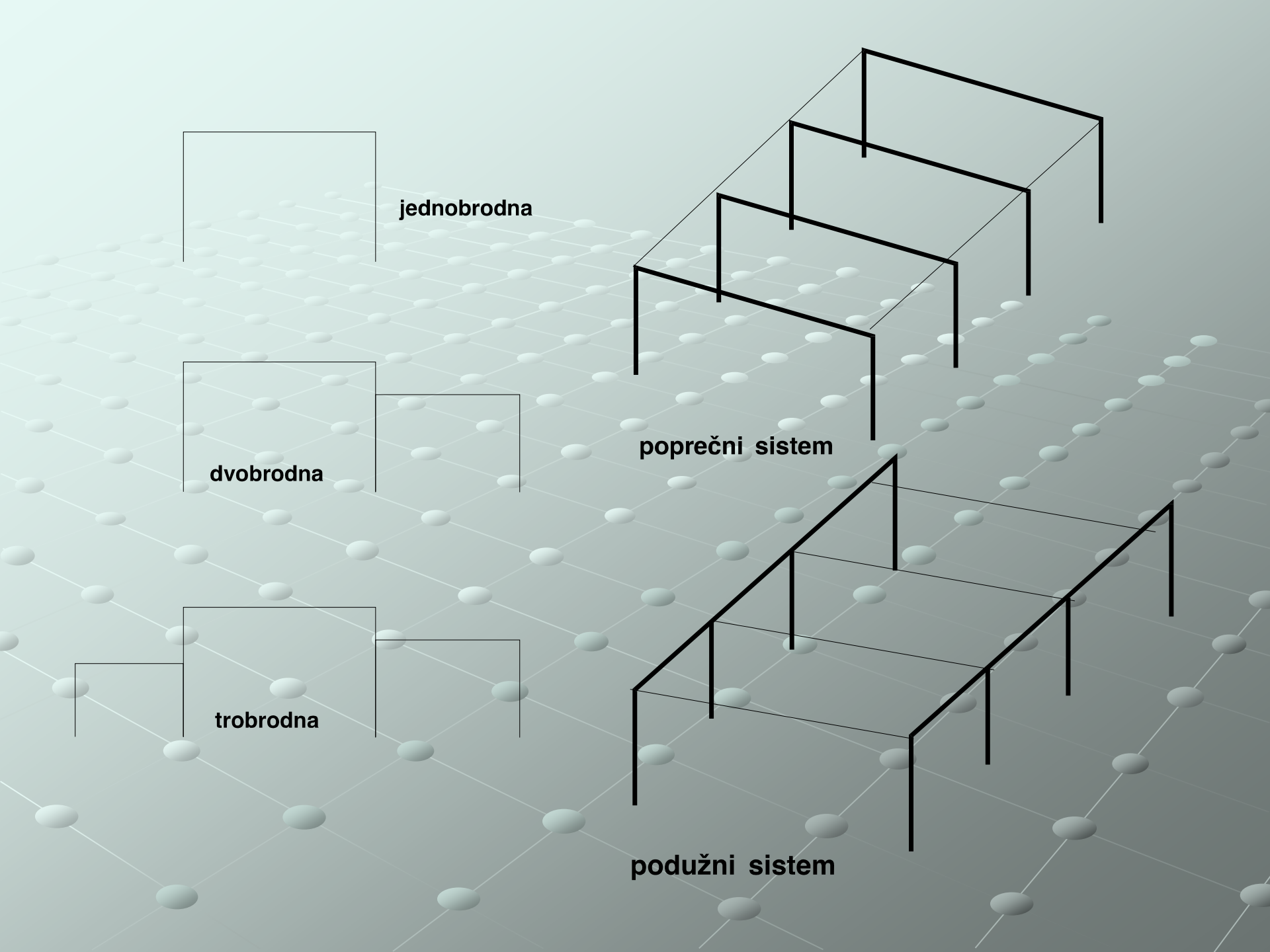
● Višespratni okvirni sistem

# OKVIRNI SISTEMI



- Dvobrodni kontinualni okvir
- Višebrodni okvir





**jednobrodna**

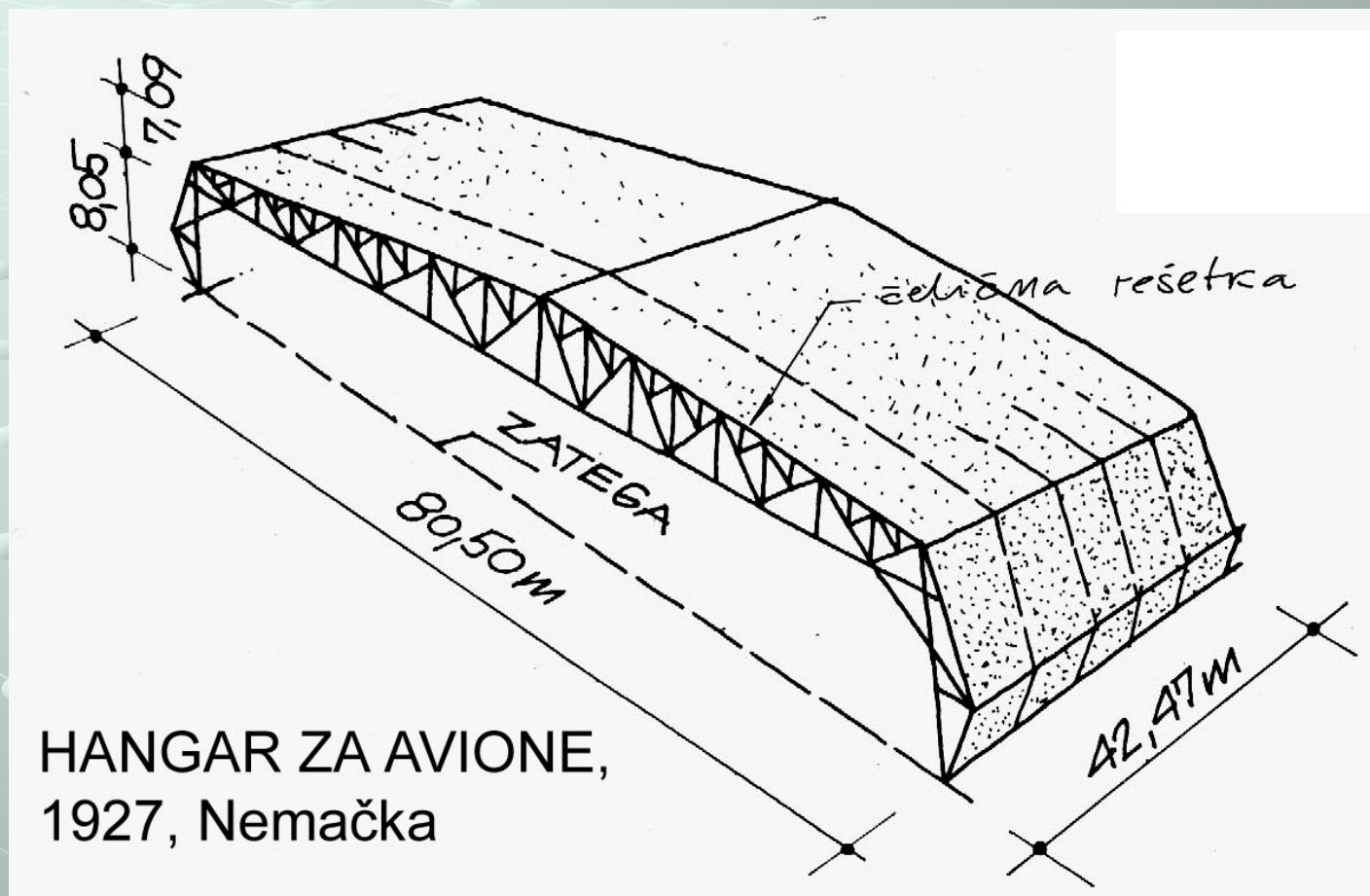
**dvobrodna**

**trobrodna**

**poprečni sistem**

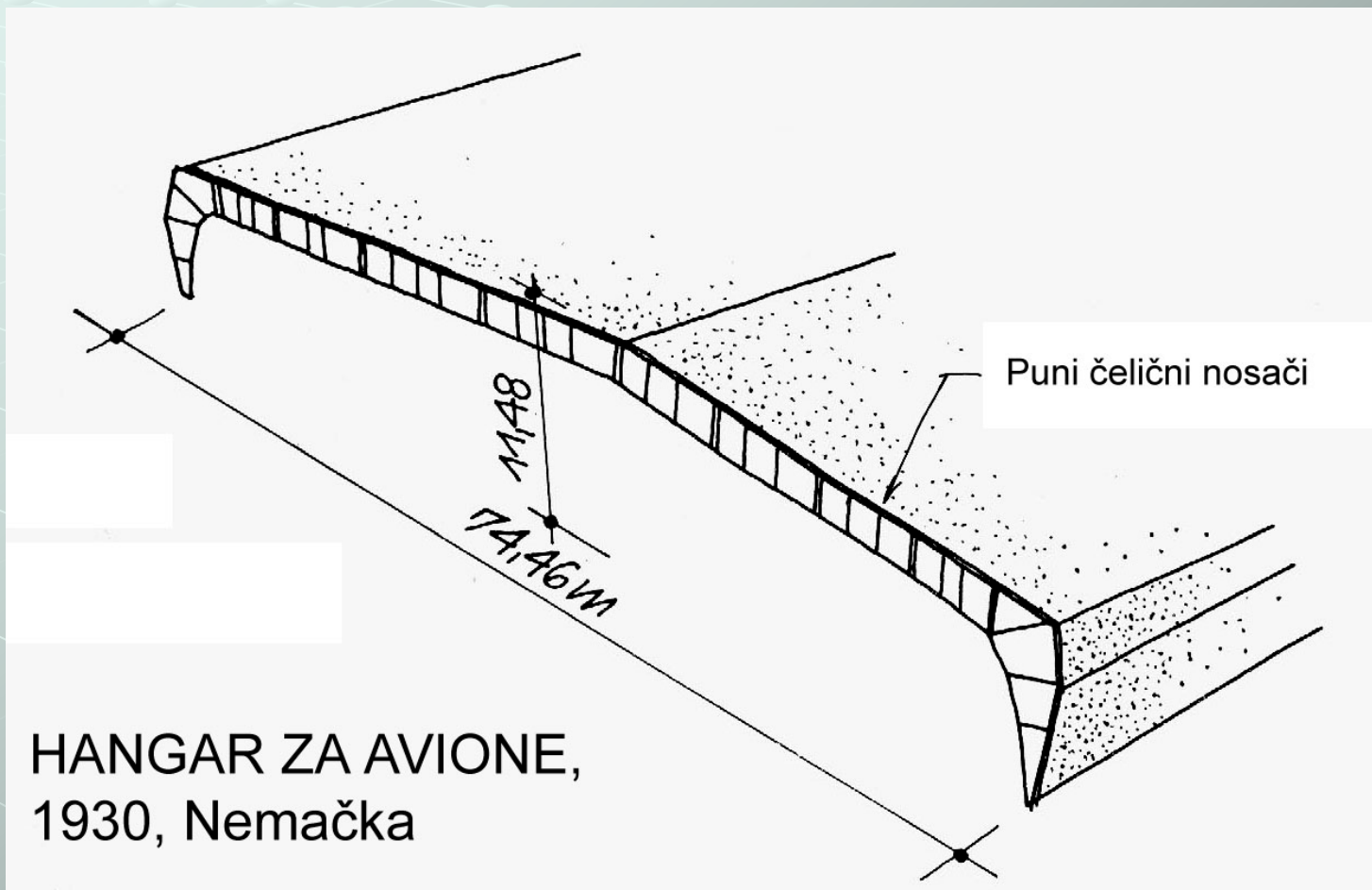
**podužni sistem**

# OKVIRNI SISTEMI



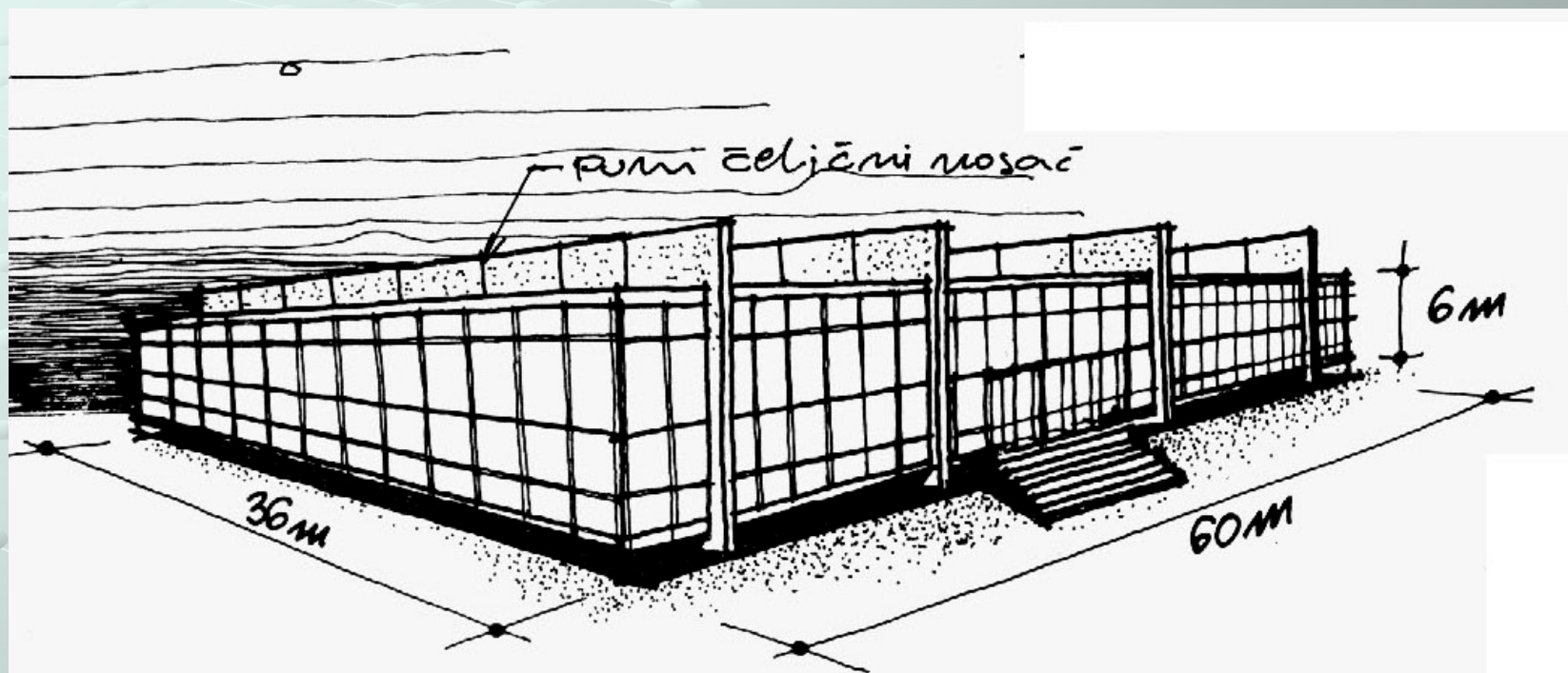
- Čelični-rešetkasti okvirni sistem

# OKVIRNI SISTEMI



- Čelični okvirni sistem od punih nosača

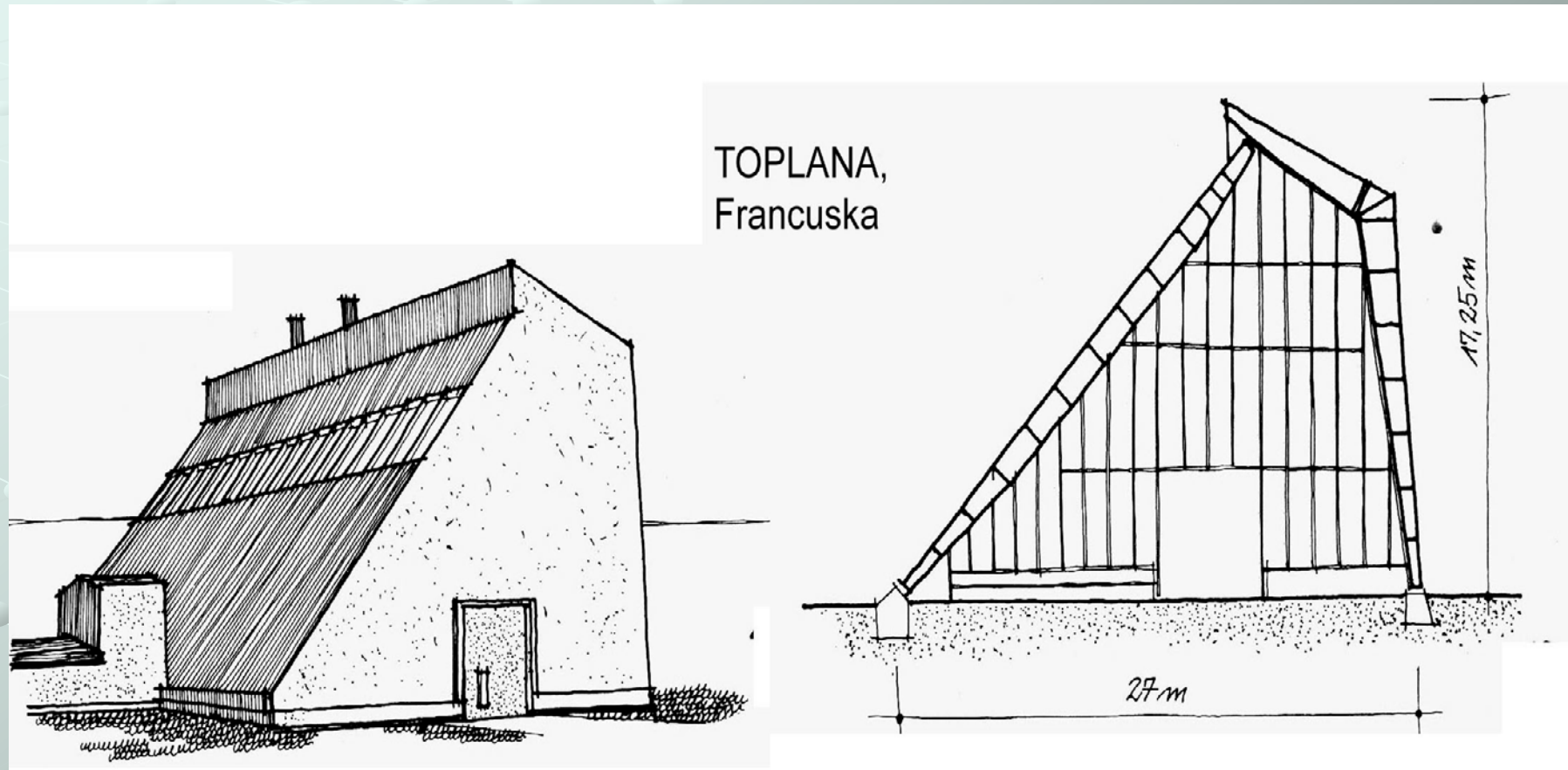
# OKVIRNI SISTEMI



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- Čelični okvirni sistem od punih nosača

# OKVIRNI SISTEMI



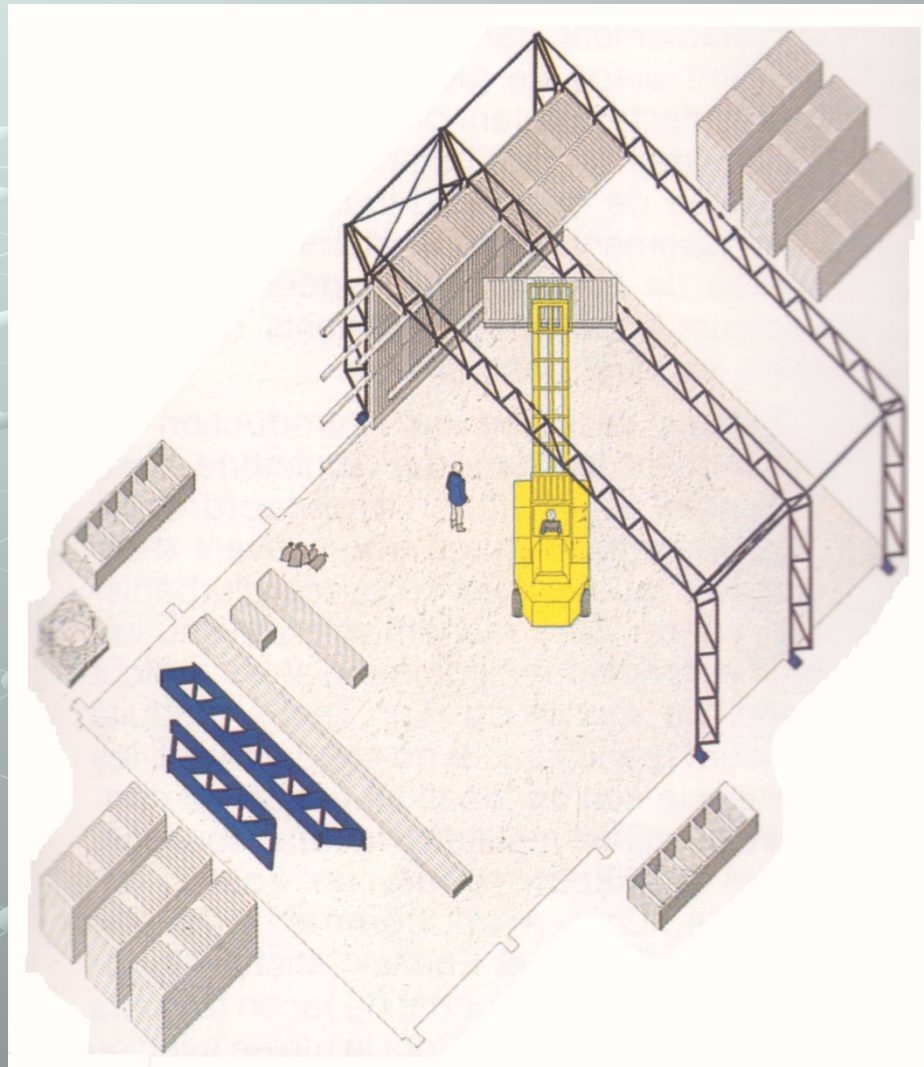
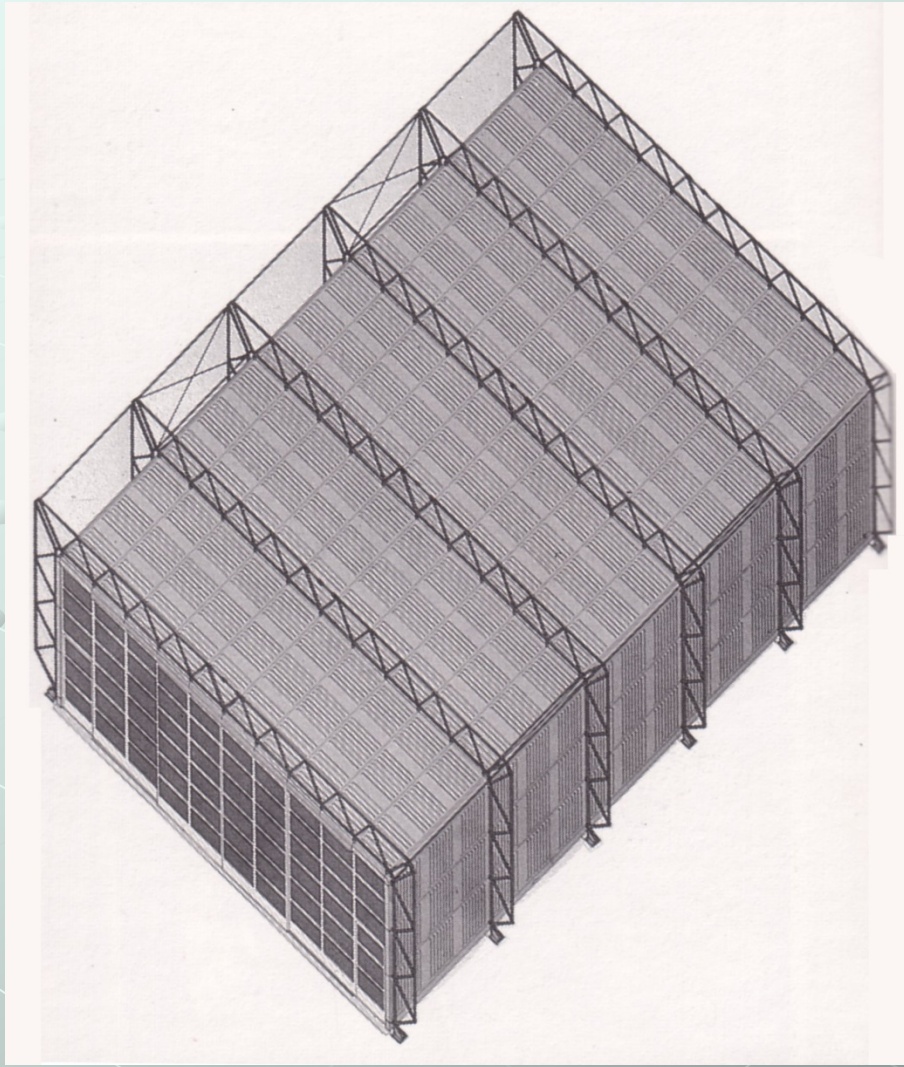
- Čelični okvirni sistem od punih nosača

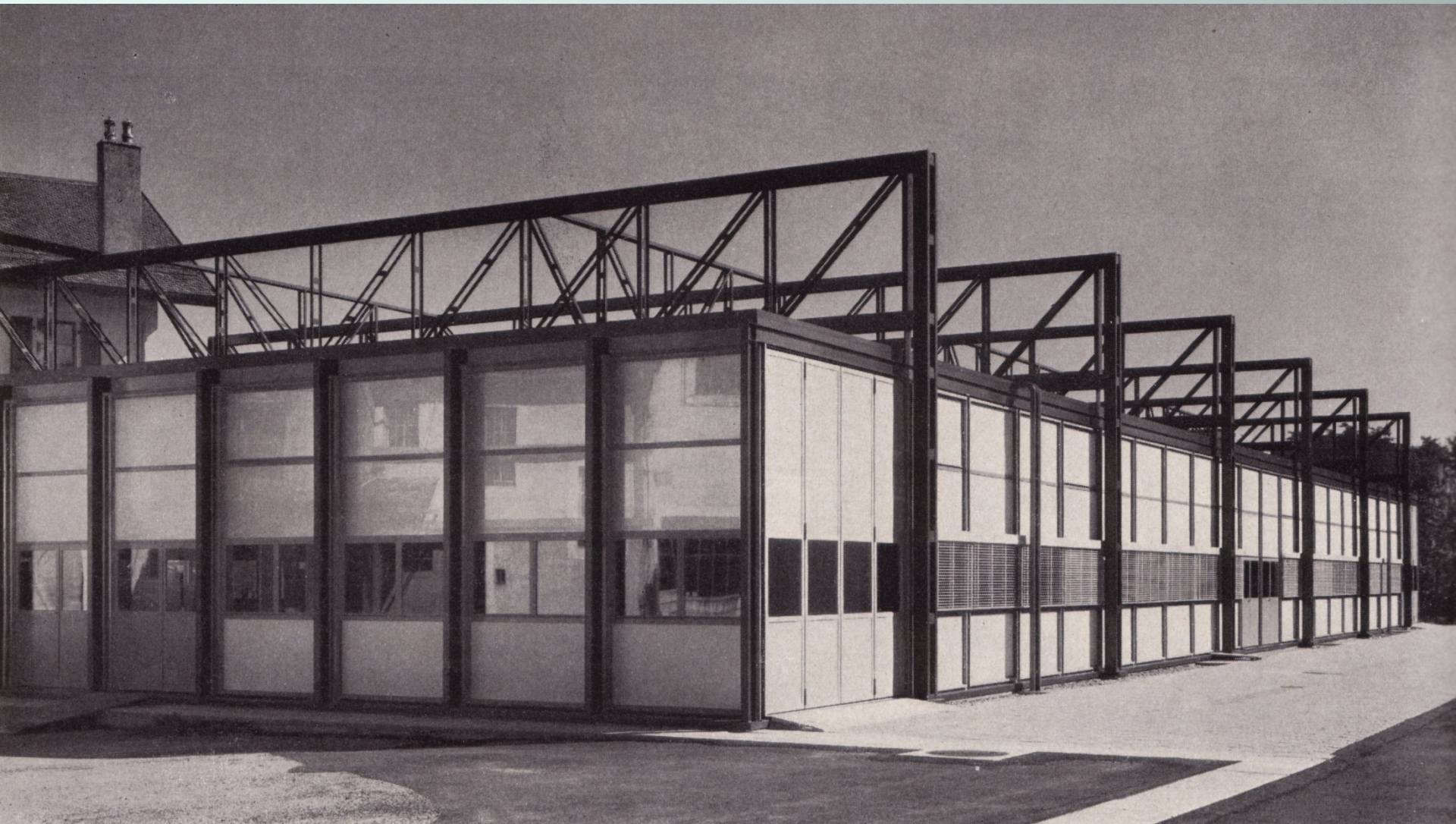


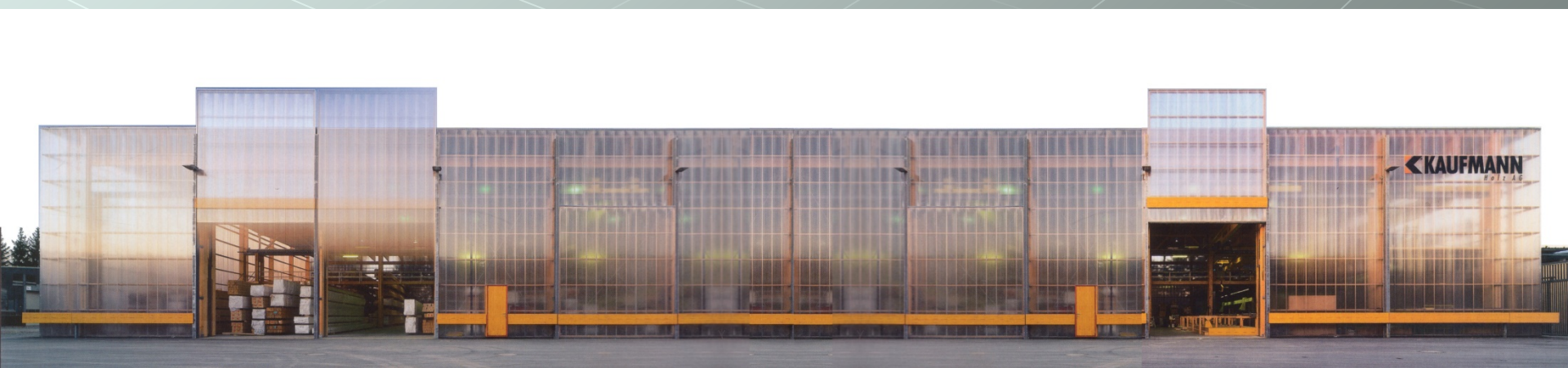
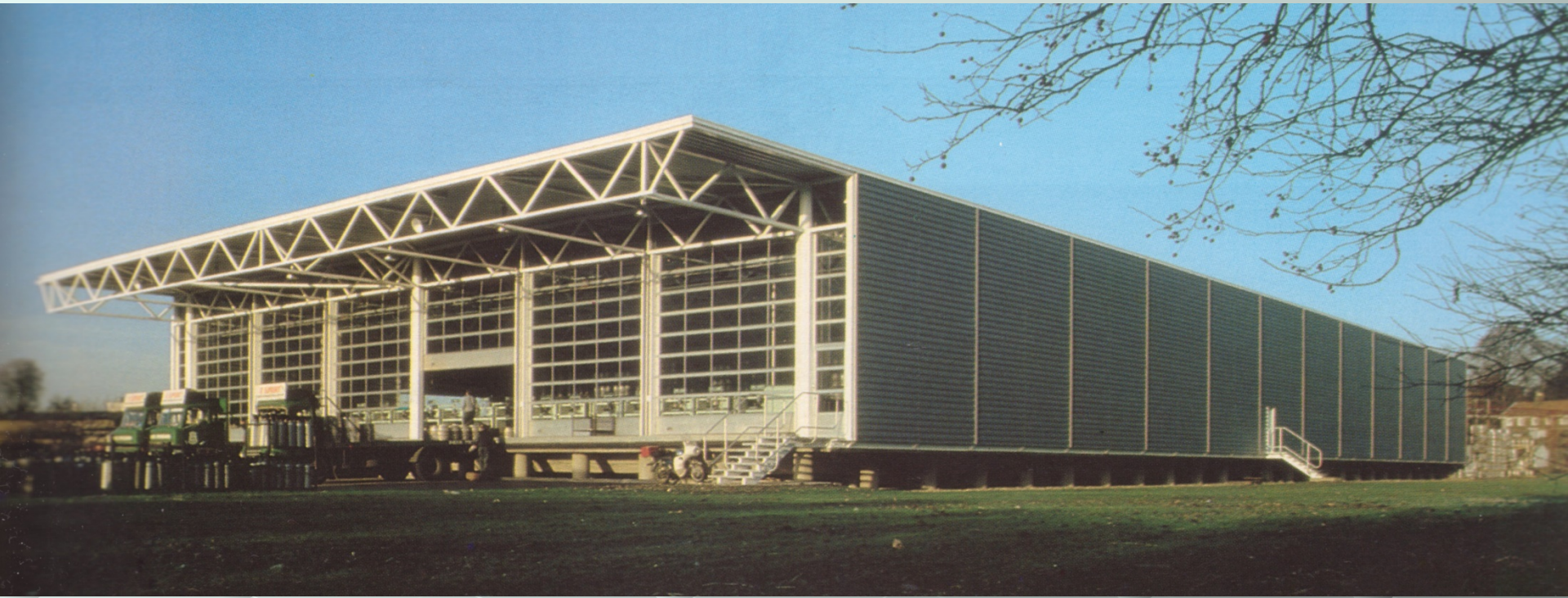








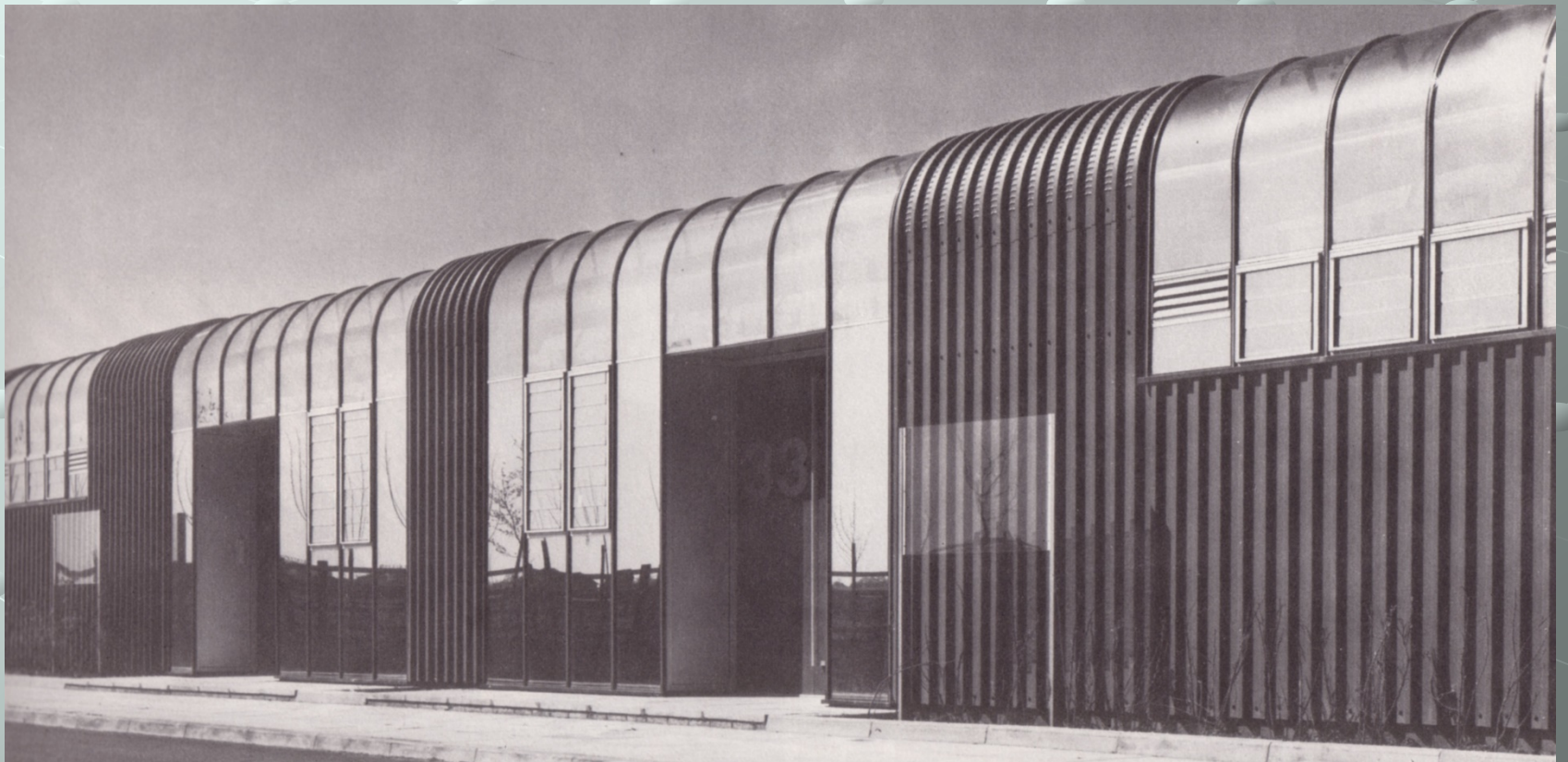
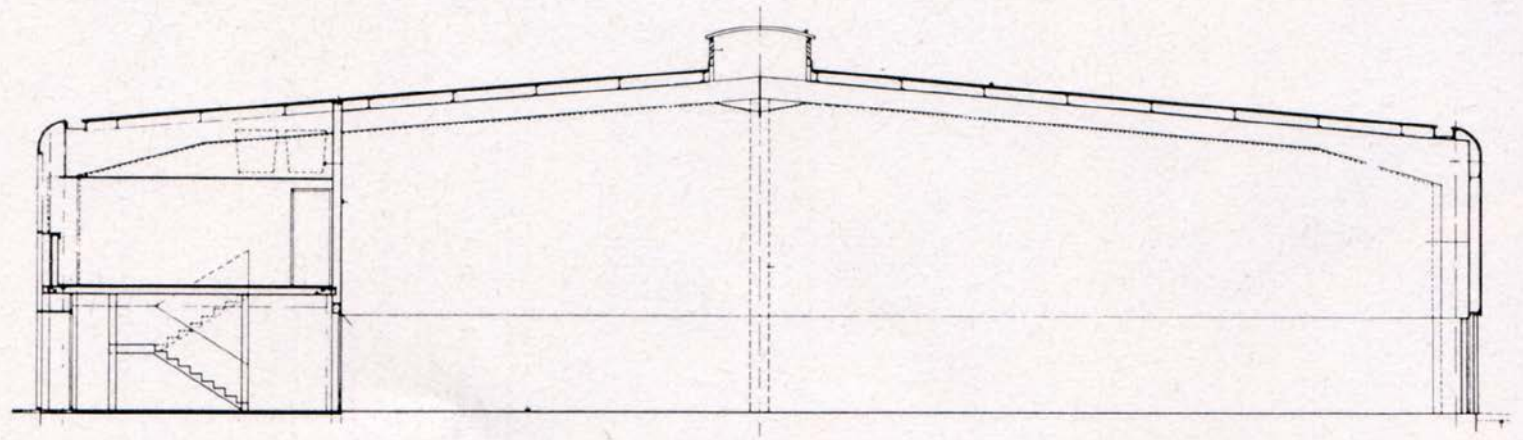






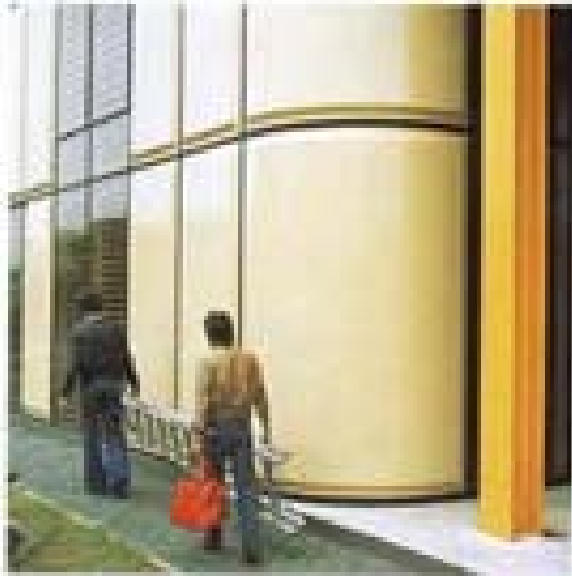






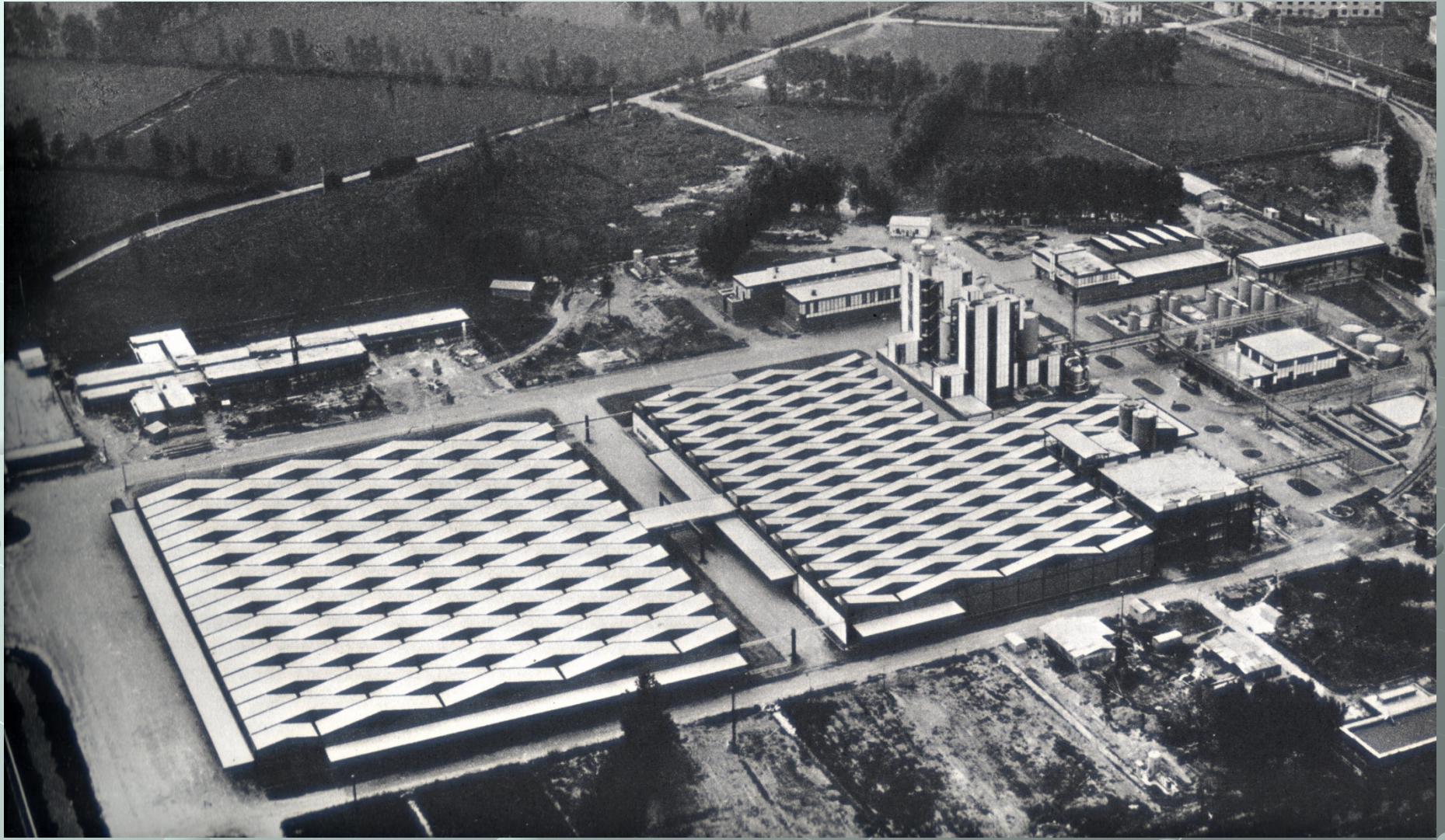


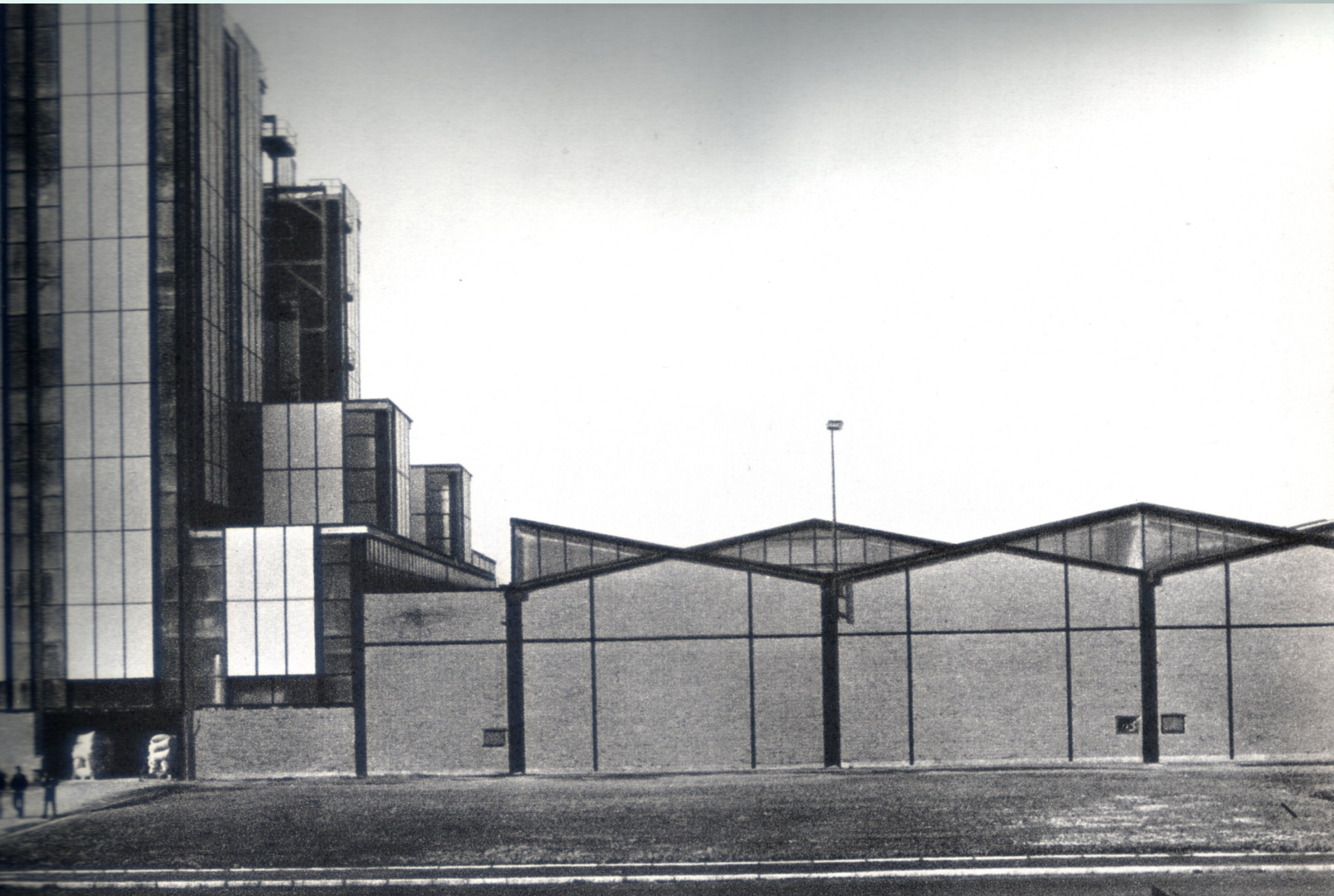








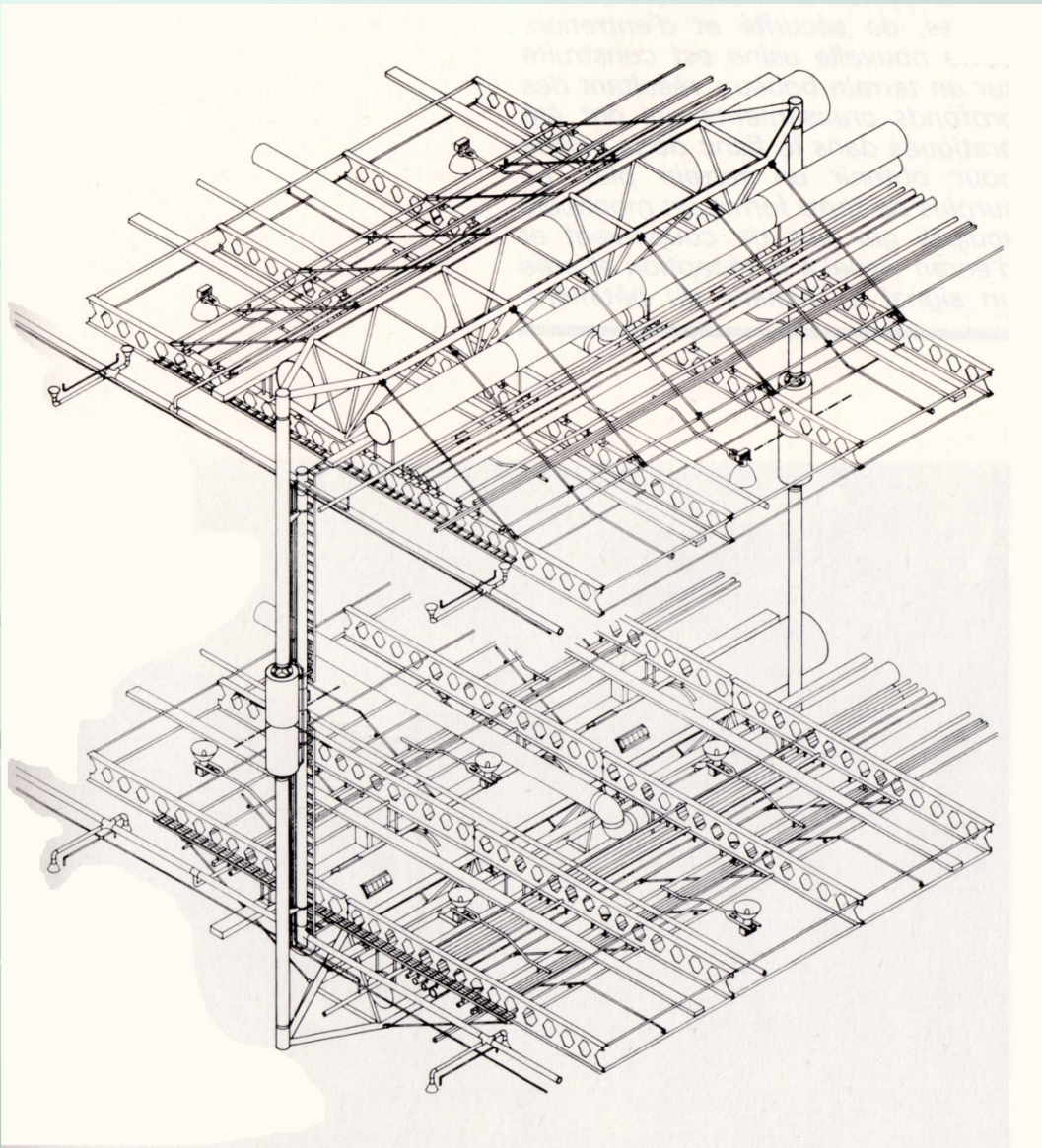




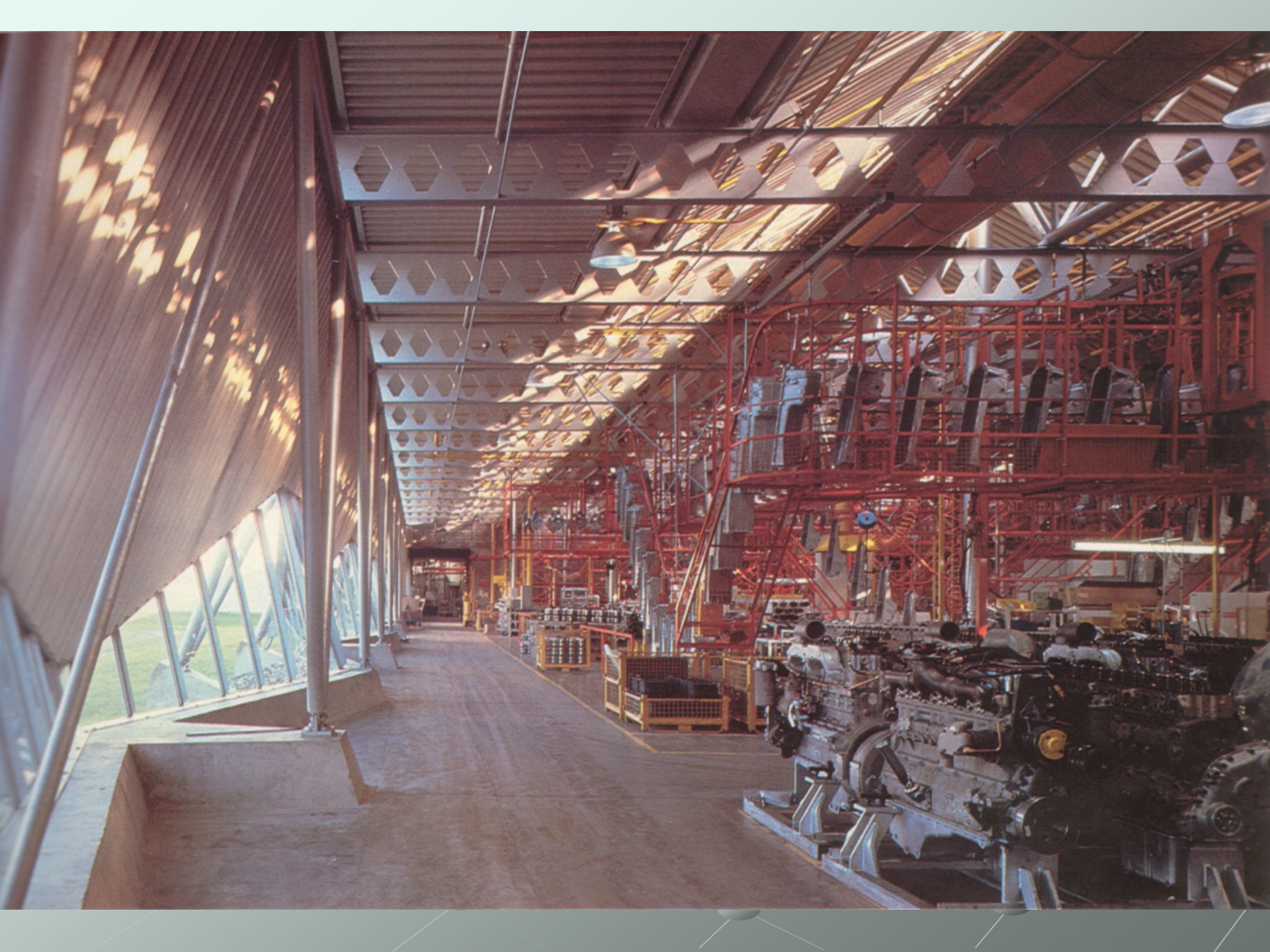


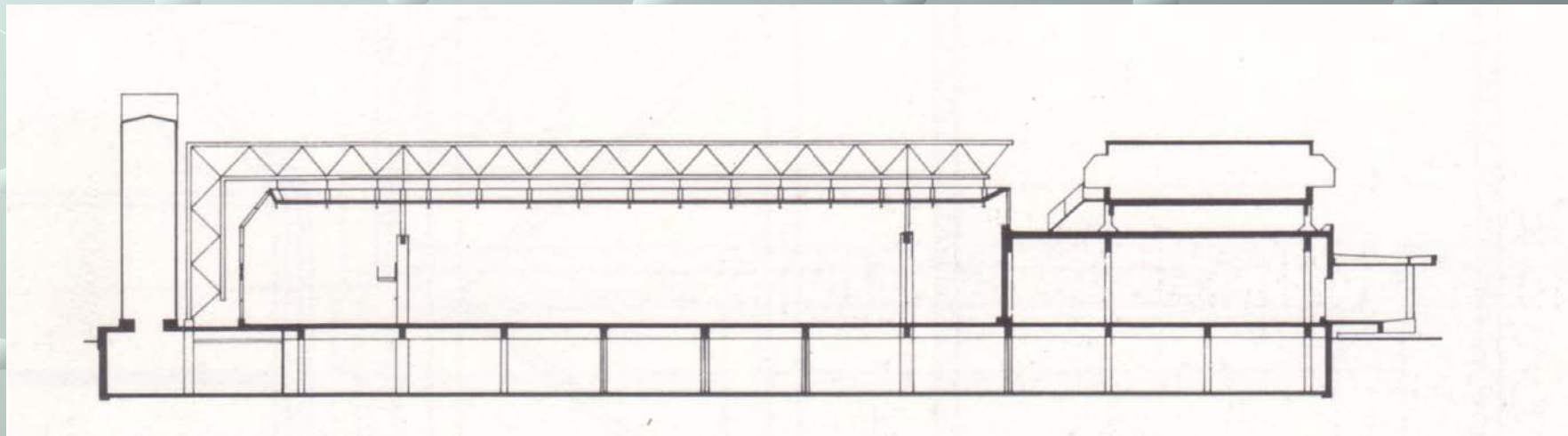
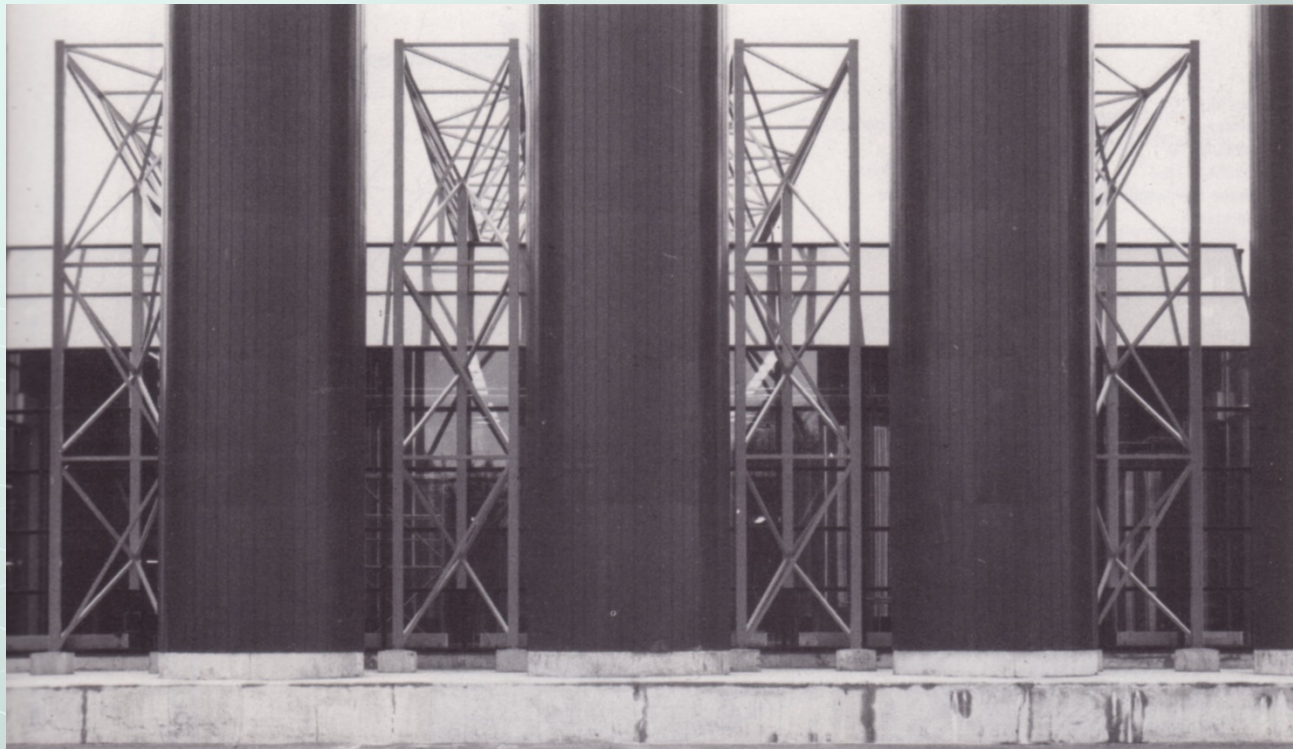


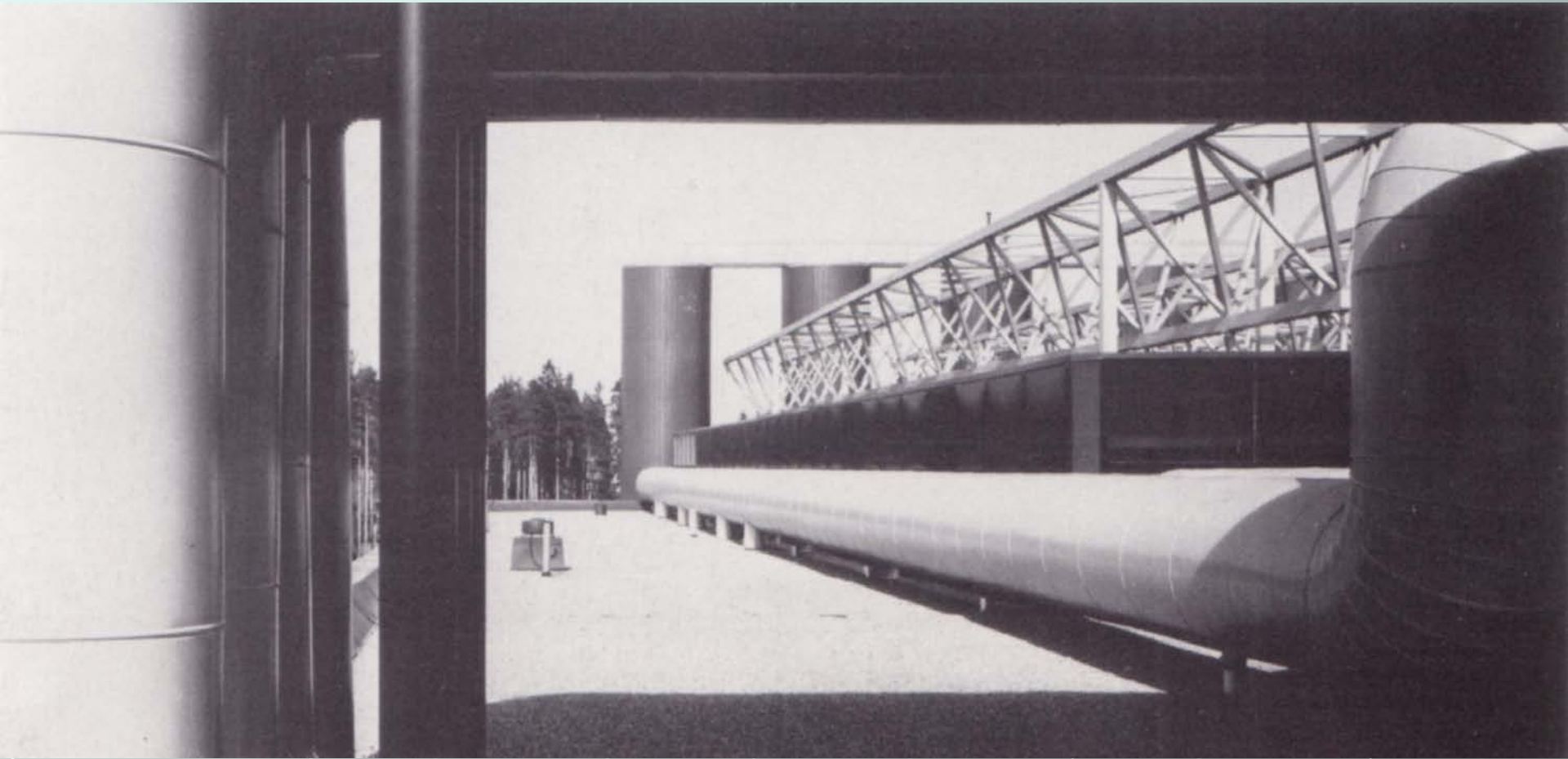
# **Linijski prostorni sistemi (razne rešetke)**



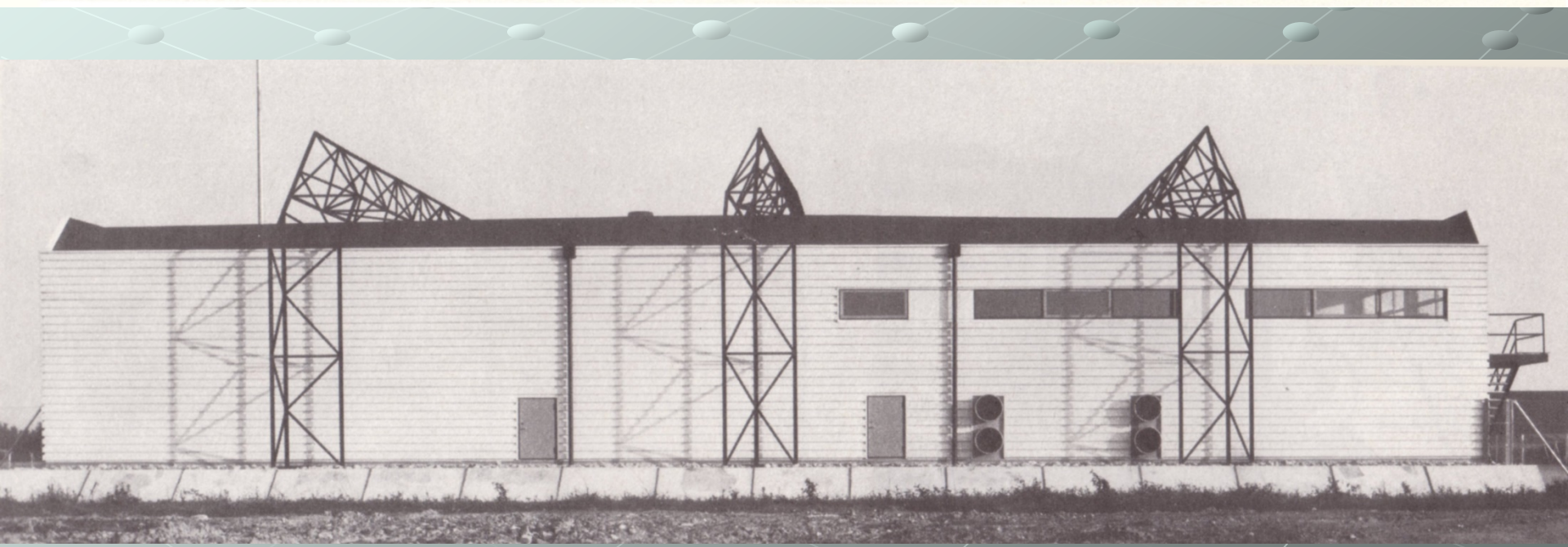
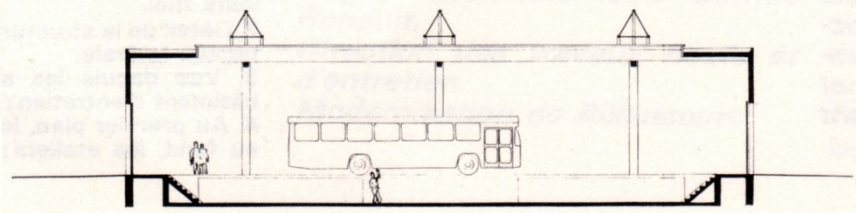
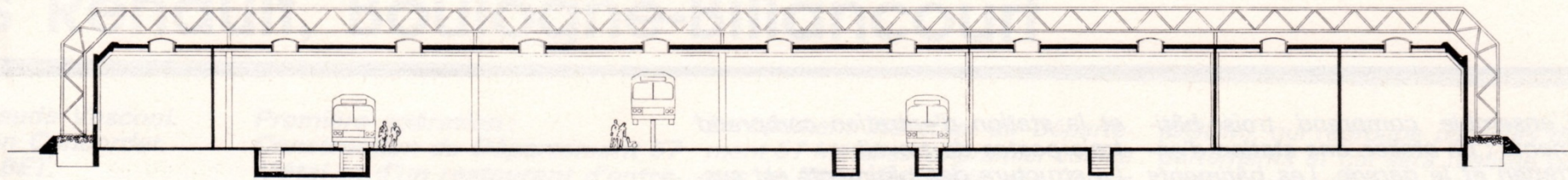


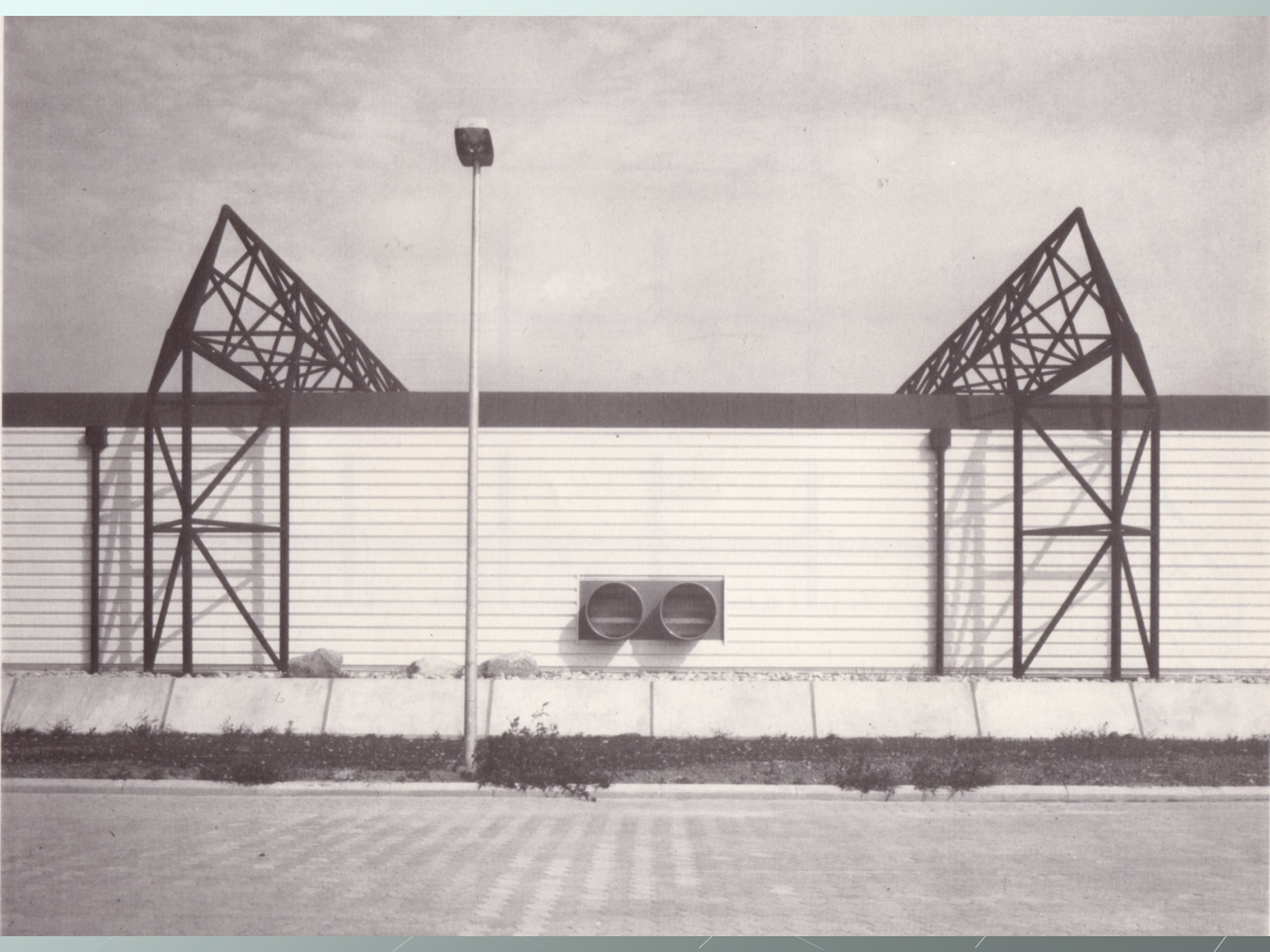


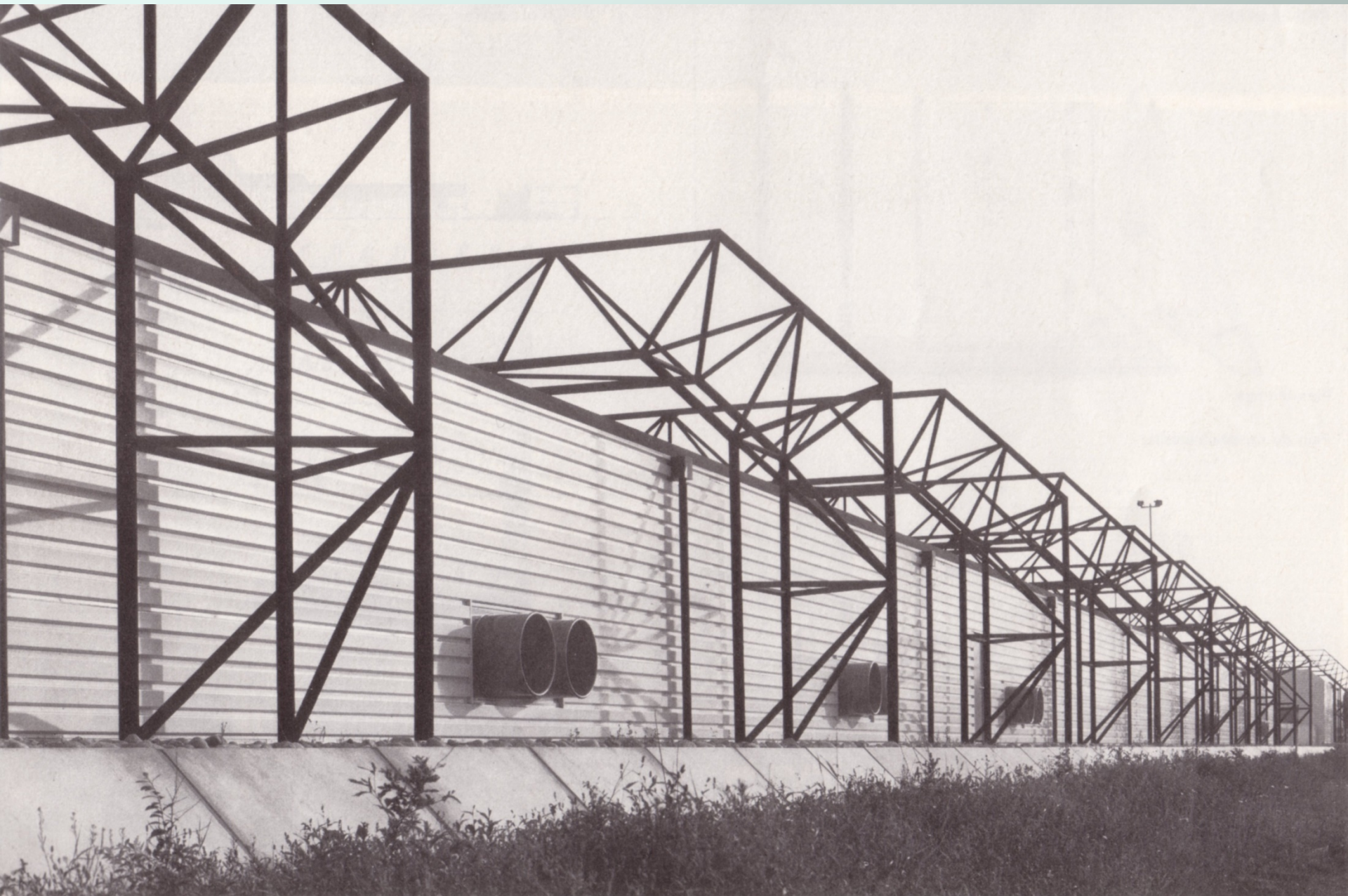


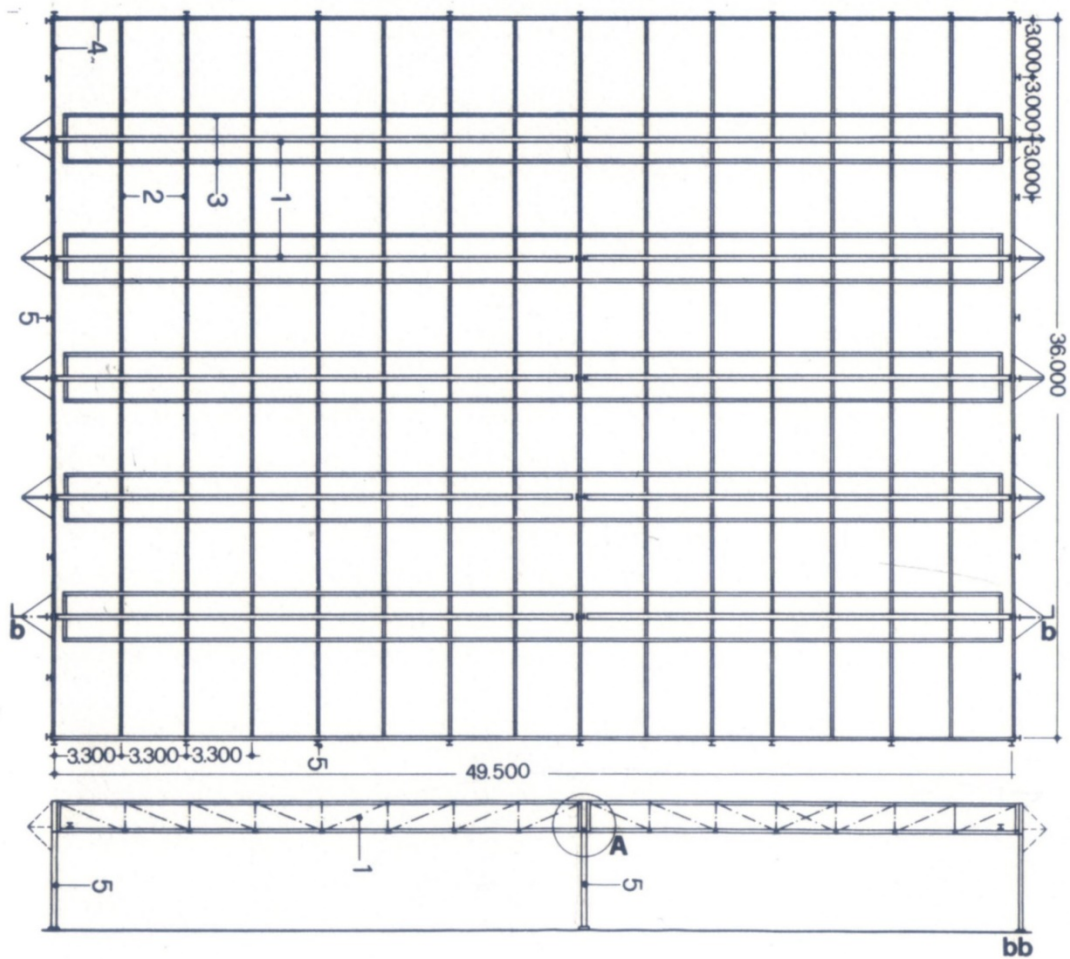
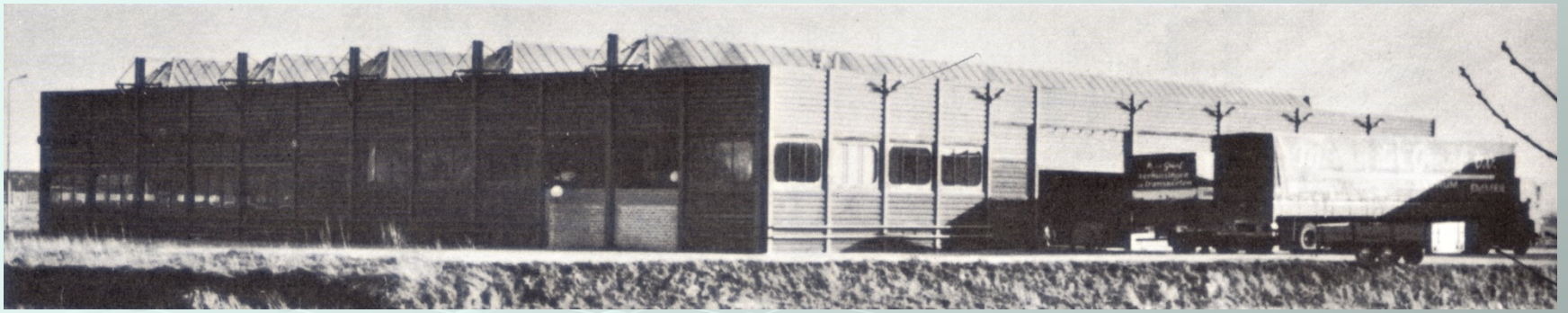


# BIEN INDUSTRIEL ET RESTAURANT





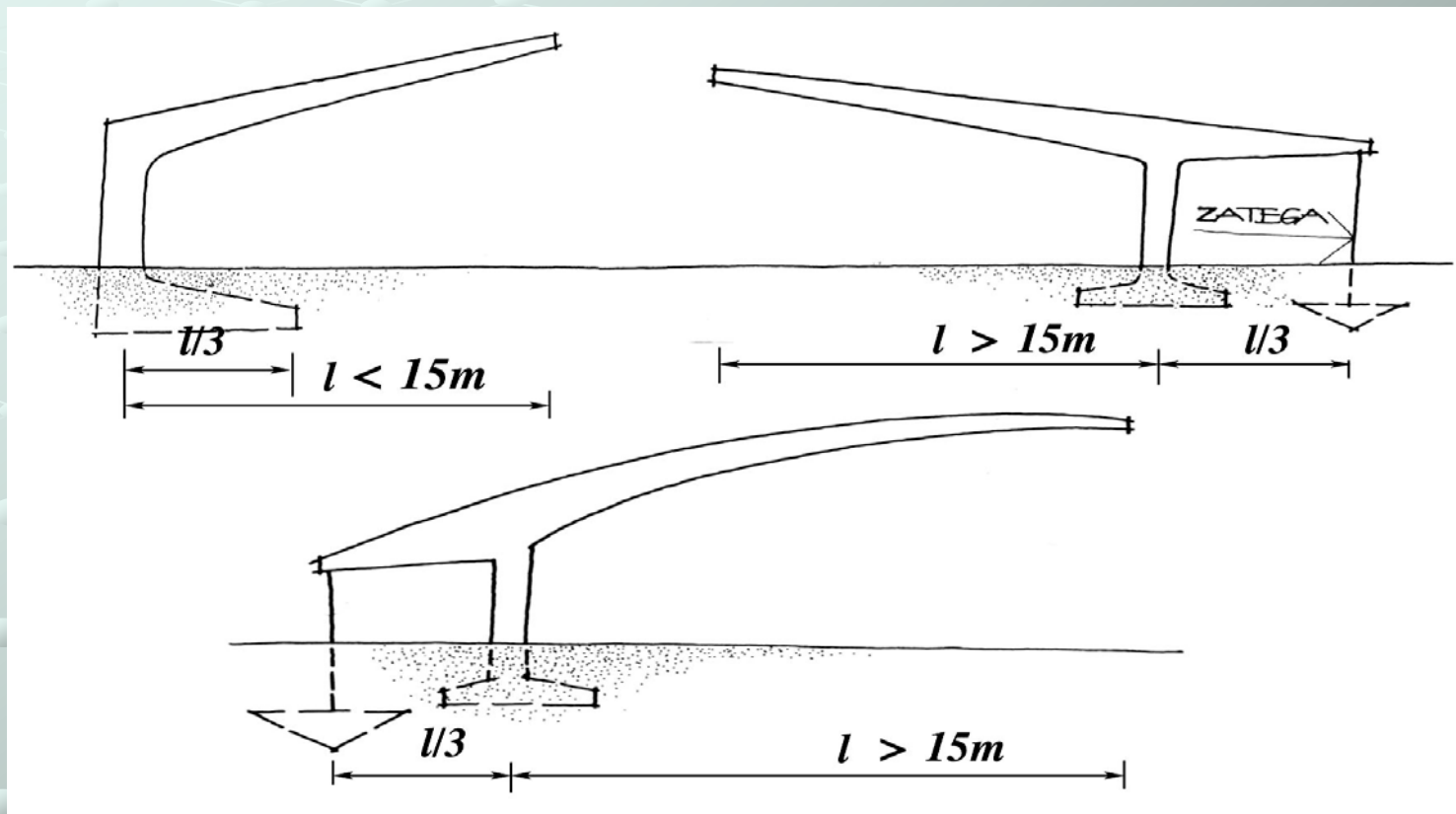








# KONZOLNI SISTEMI



- STATIČKE ŠEME KONZOLNIH SISTEMA