

MİMAR
SEDAT SIRRI AKLAN

YAPI AHŞAP SU

Ahşapla Yap Ahşapla Yaşa

11. Seminer

18.03.2021 18:30-20:00



YAPI AHŞAP SU

*Yapısal Ahşap Su İlişkisi
Problemler, Çözümler ve Detaylar*

Konuşmacı

Sedat Sırrı Aklan
Mimar

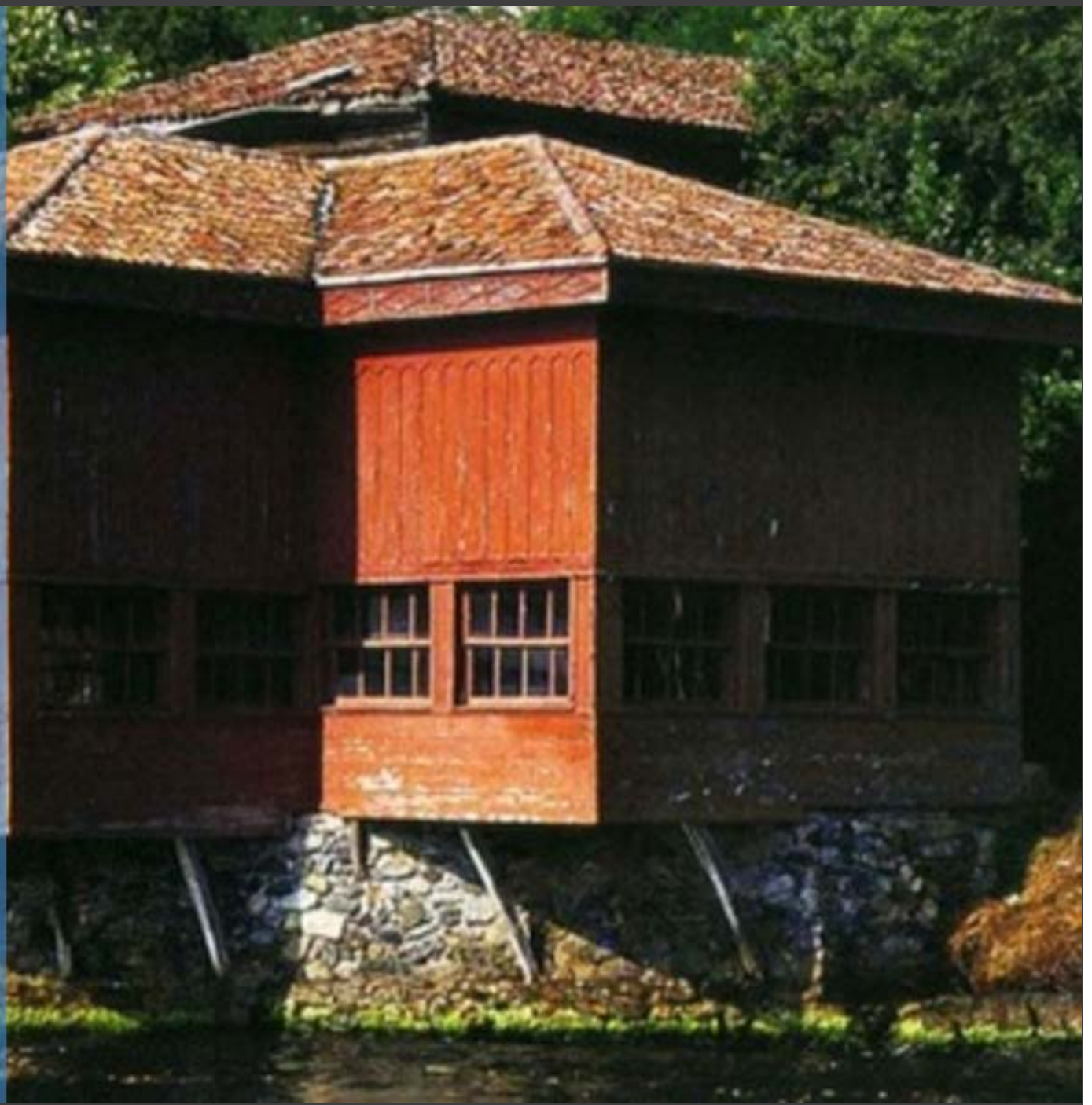
Zoom Meeting

18 Mart 2021

Perşembe Saat : 18:30 - 20:00



Kayıt için: www.ahsap.org.tr





YAPI





























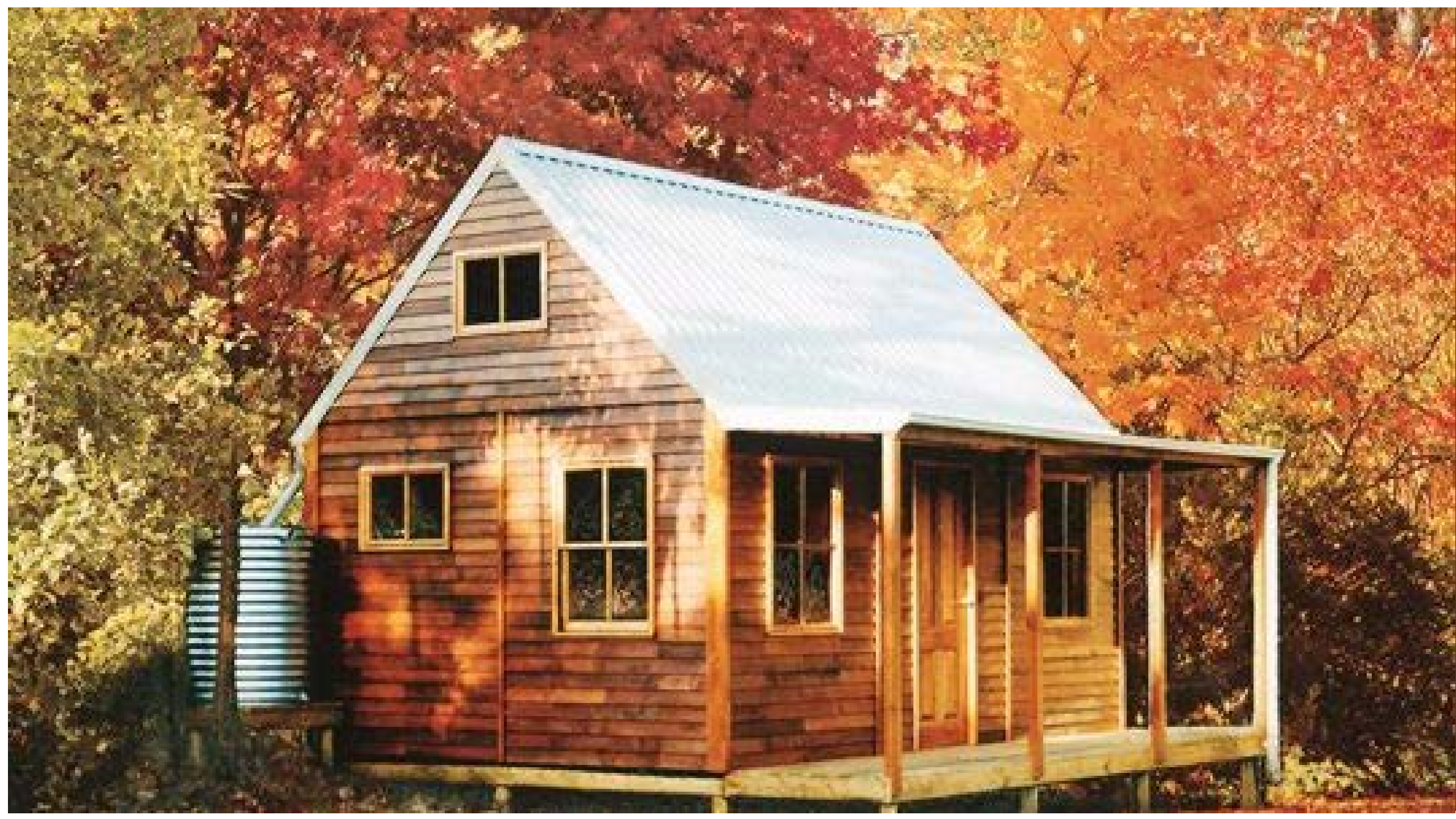


















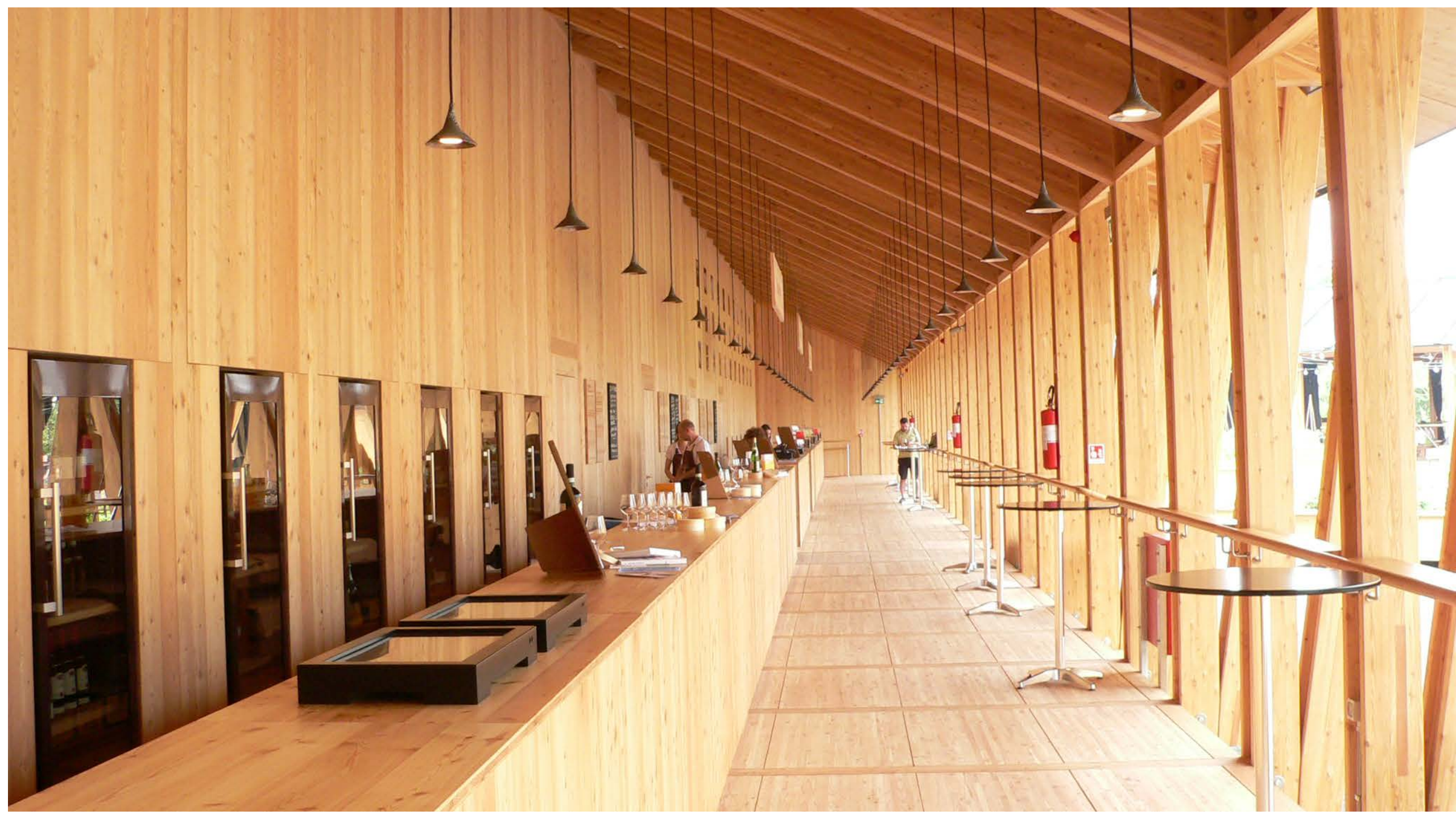








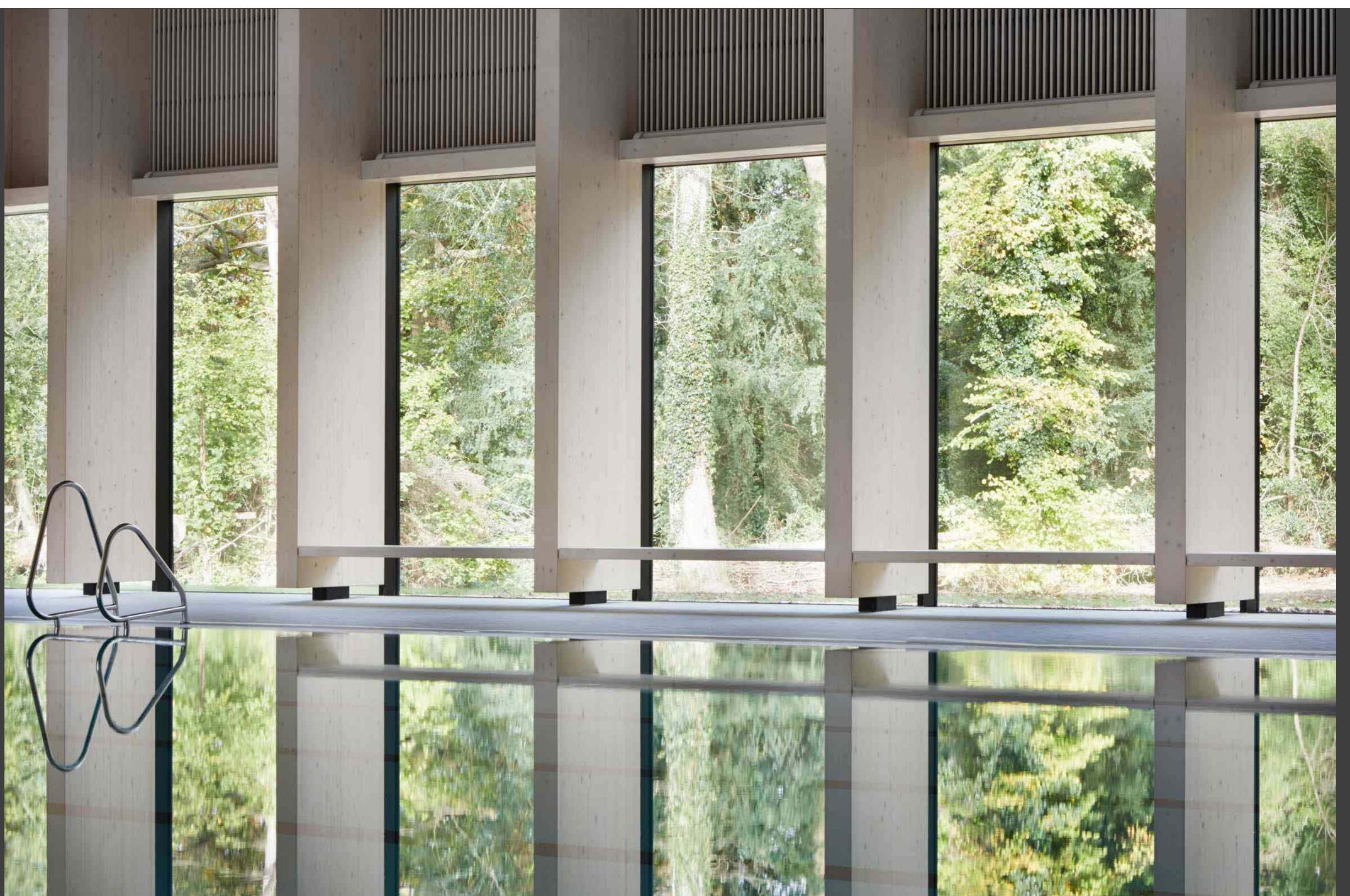






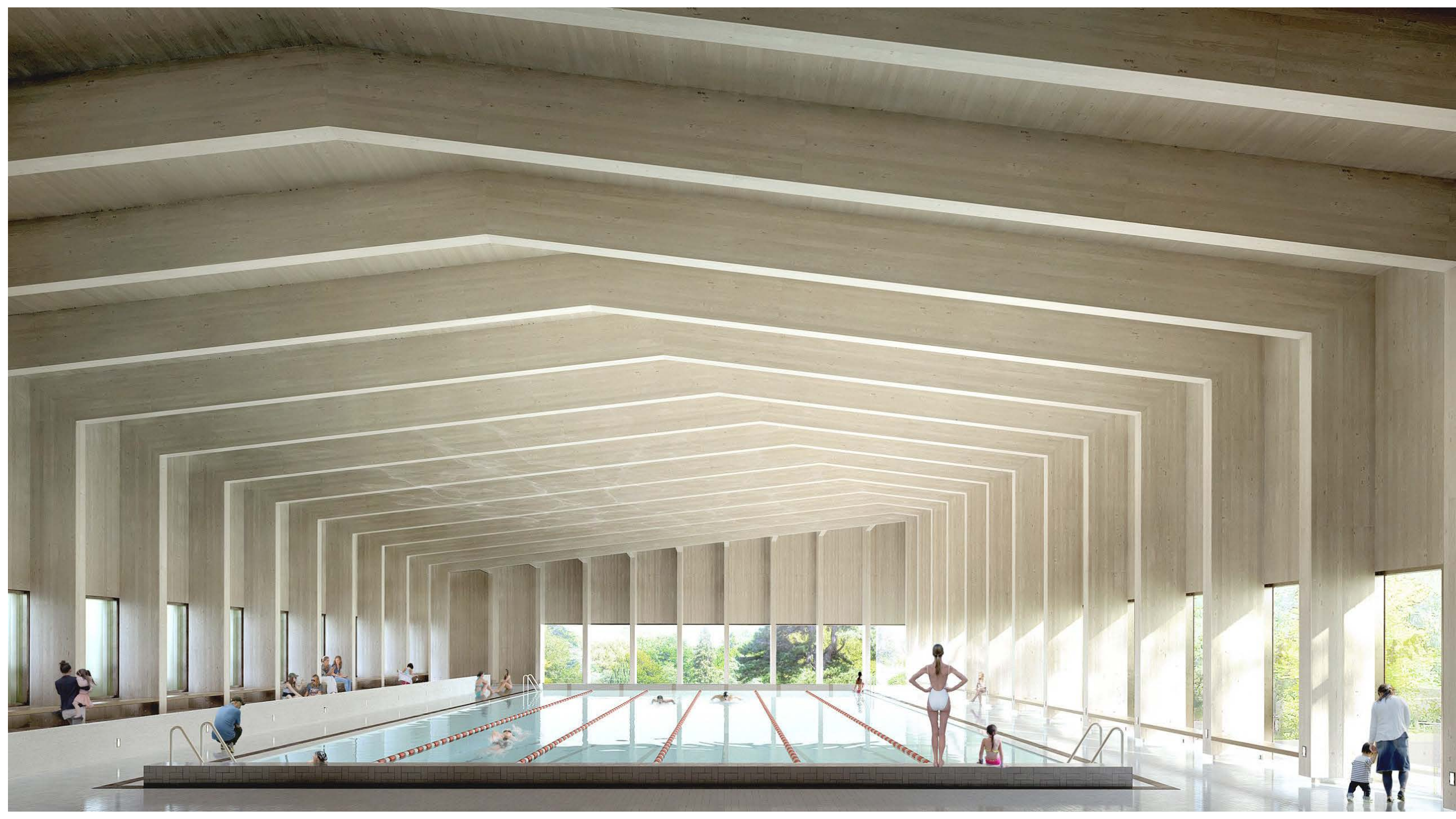


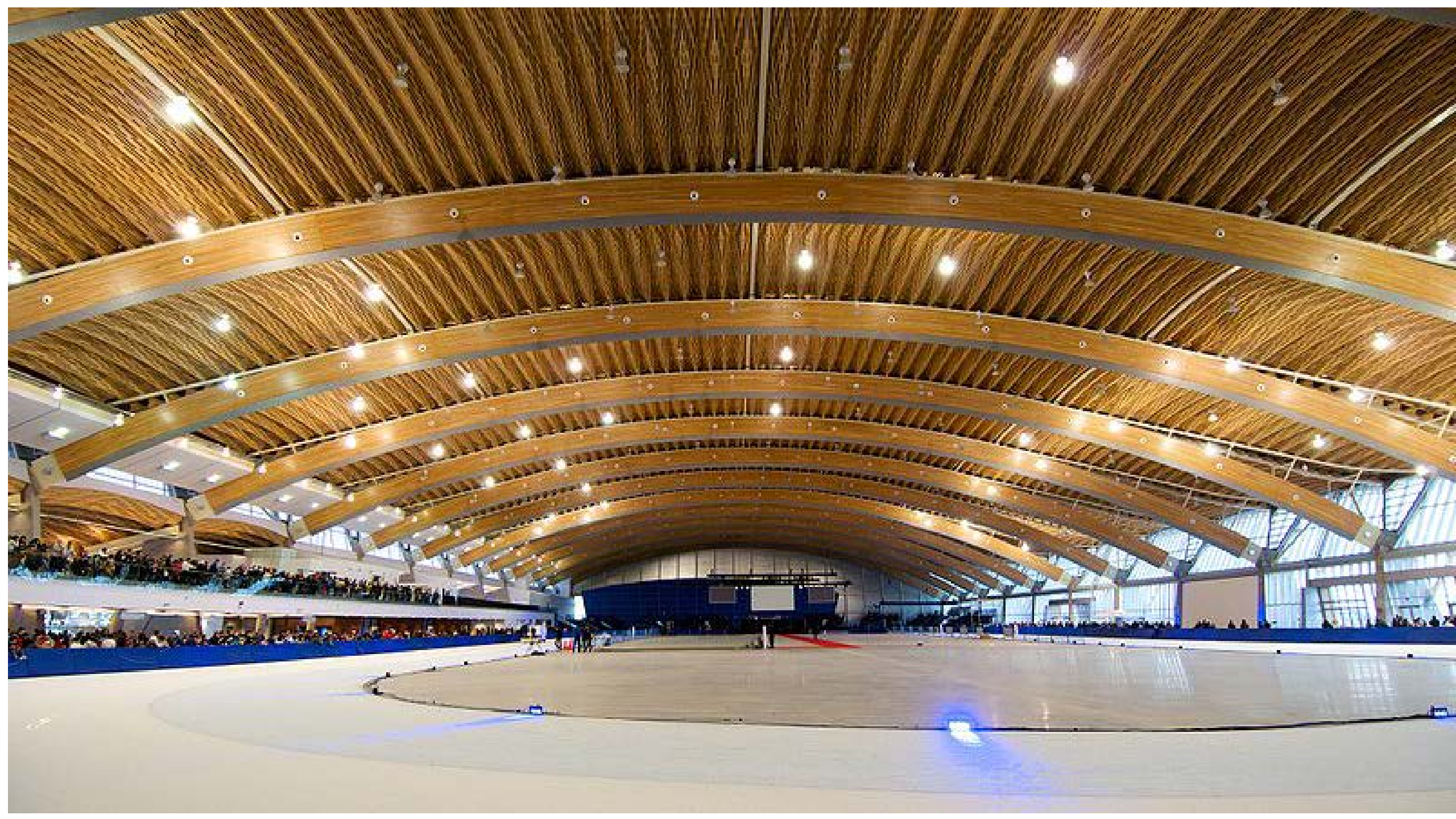




















VISUAL CONNECTION WITH NATURE

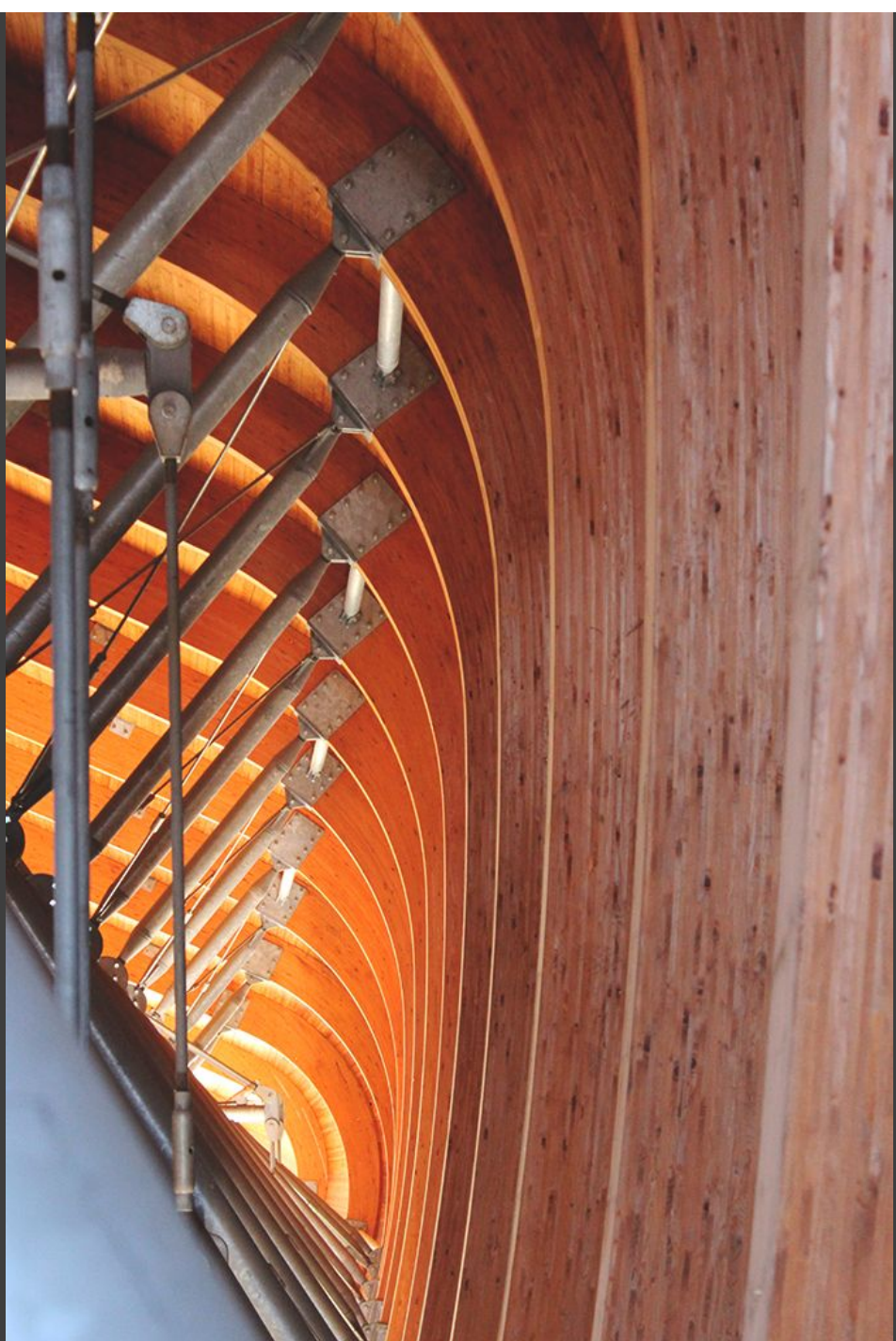
Physical likeness to nature—a deeply familiar, spiritual, and humanistic delight





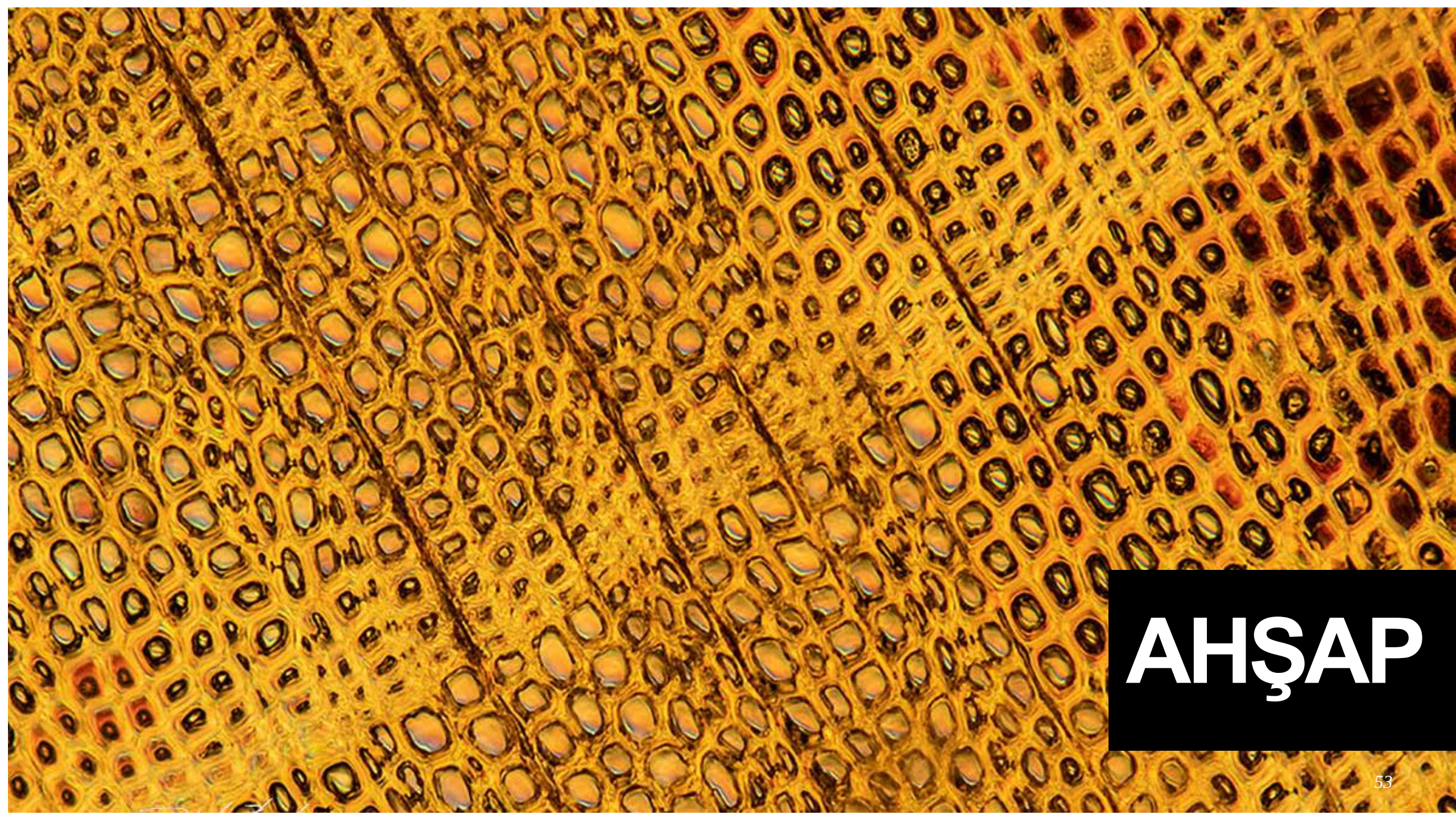






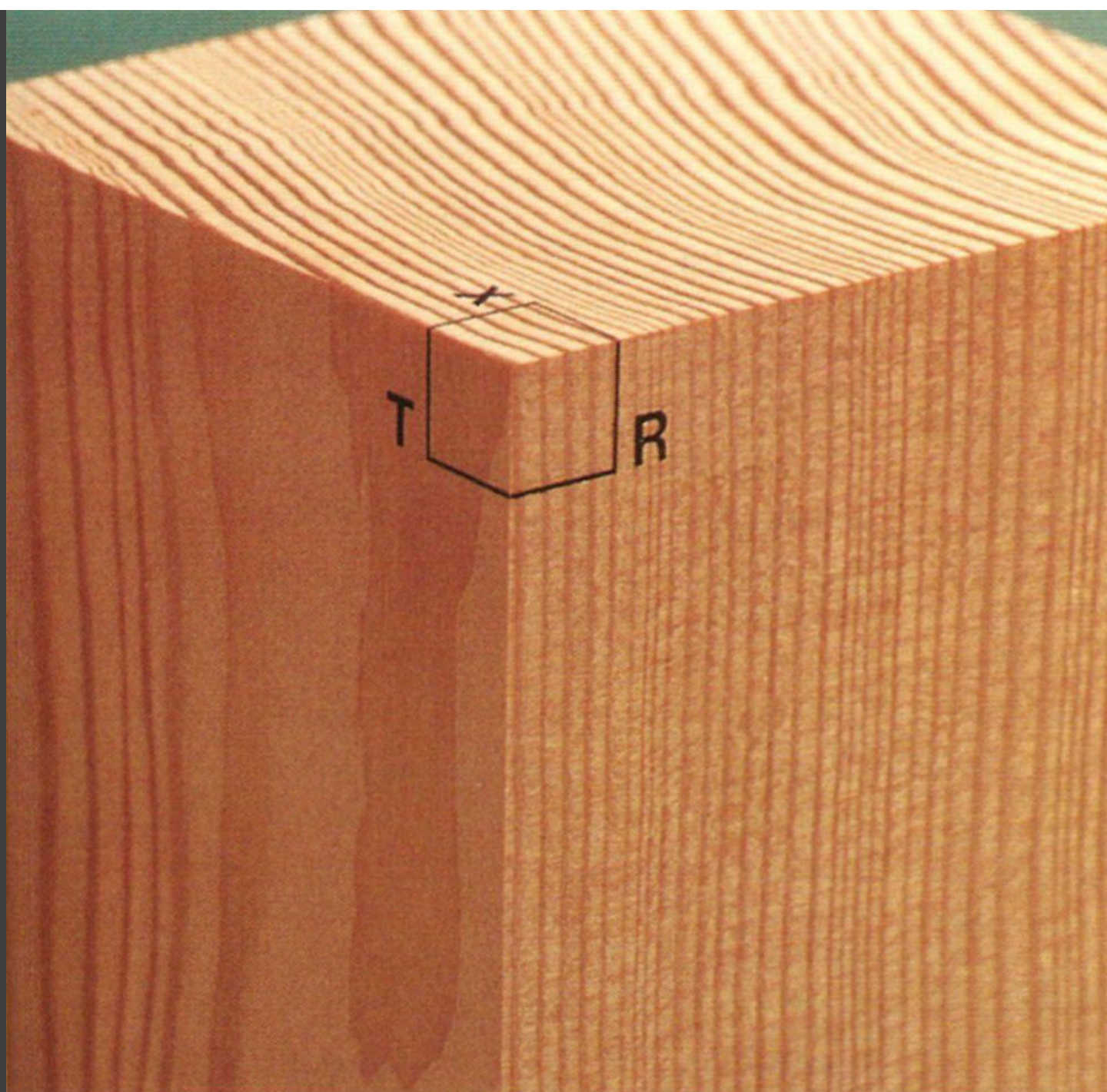




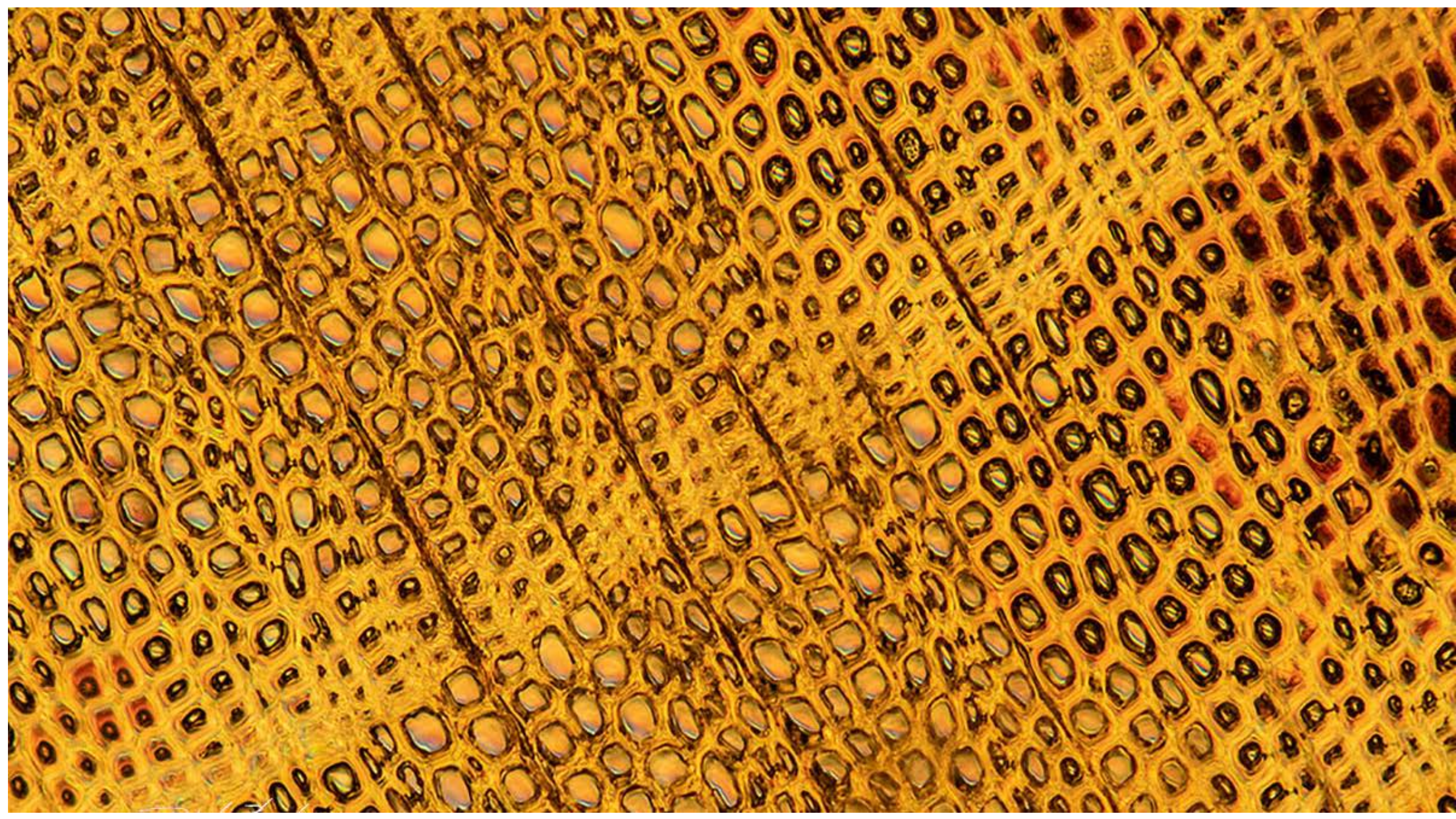


AHŞAP









Wood Cell Moisture

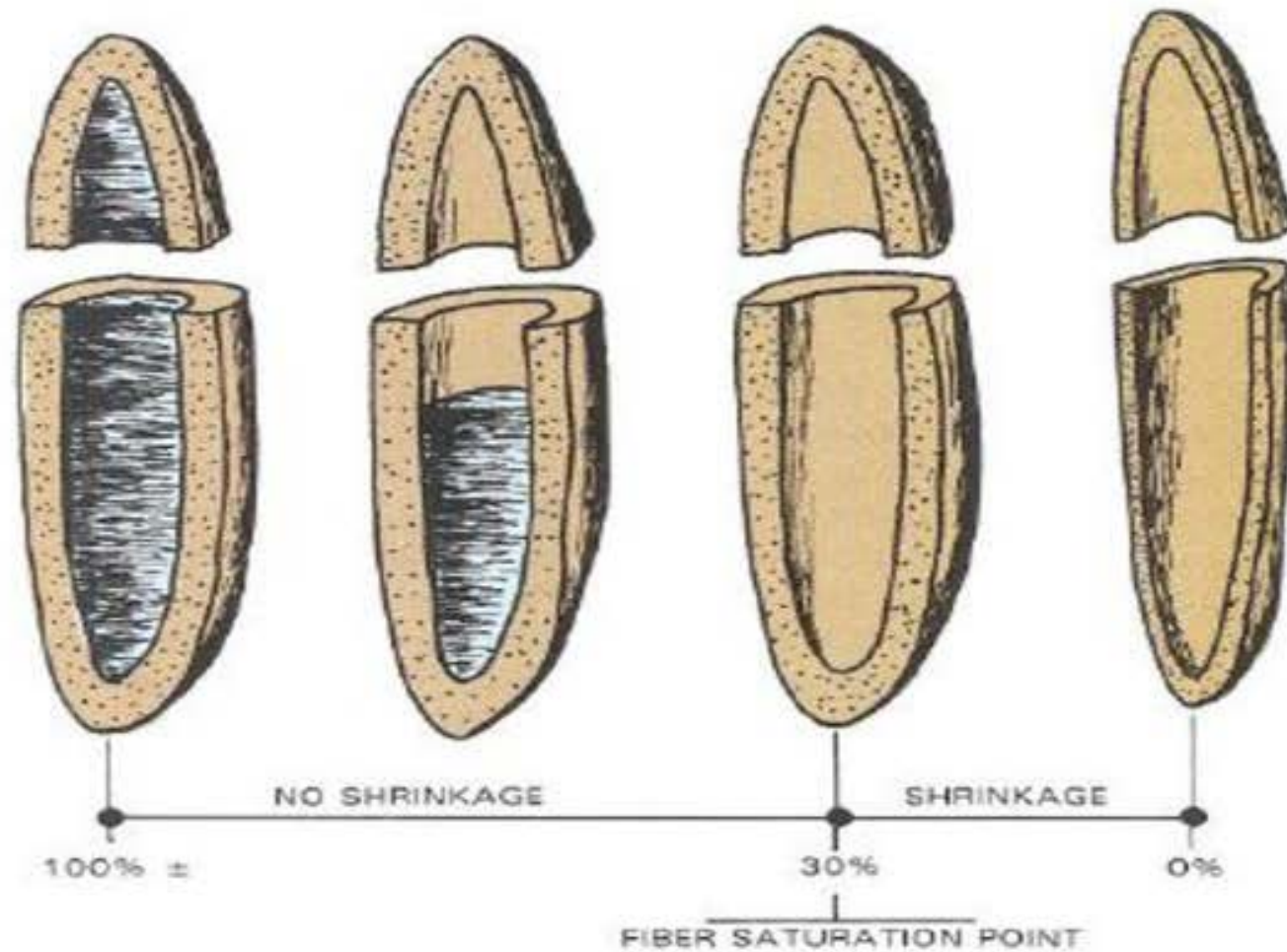


Fig. 35-7. How a wood cell dries. First the free water in the

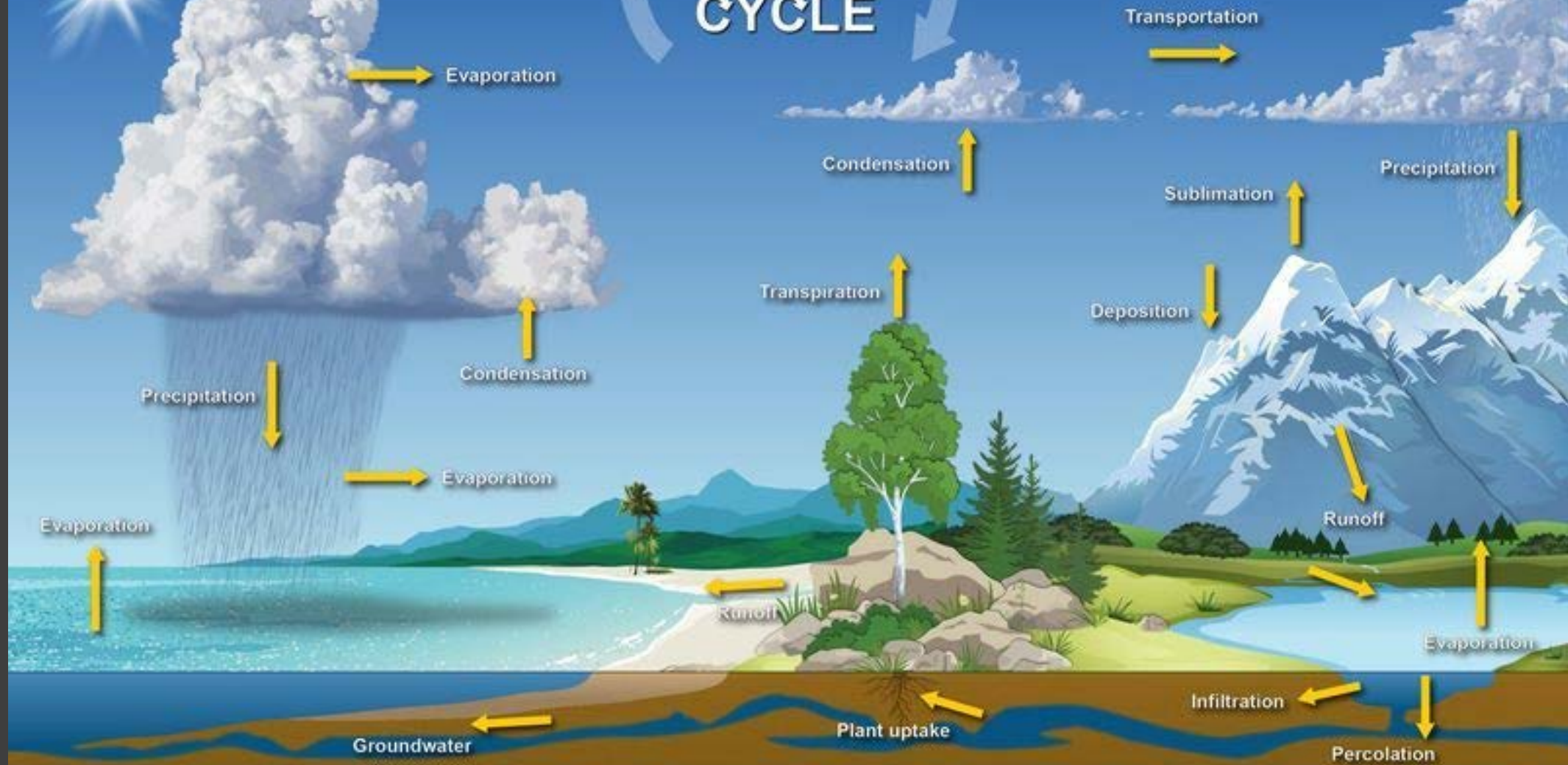


YAĞMUR - SU





THE WATER CYCLE



EVAPORATION: The process where liquid water changes into water vapor (gas).

CONDENSATION: The process where water vapor (gas) changes into water droplets (liquid).

PLANT UPTAKE: Water taken from the groundwater flow and soil moisture.

TRANSPIRATION: Evaporation of liquid water from plants and trees into the atmosphere.

TRANSPORTATION: The movement of solid, liquid and gaseous water through the atmosphere.

RUNOFF: River, lake, and stream transport of water and transport of ice in glaciers.

PRECIPITATION: Water that falls to the earth. Most precipitation falls as rain but includes snow, sleet, drizzle, and hail.

GROUNDWATER: Underground water flow (aquifers).

DEPOSITION: The process where water vapor (gas) changes into ice (solid), skipping the liquid phase.

SUBLIMATION: The process where ice and snow (solid) change into water vapor (gas), skipping the liquid phase.

INFILTRATION: Movement of water into the ground from the surface.

PERCOLATION: Movement of water past the soil going deep into the groundwater.

National Weather Service
www.weather.gov/jetstream







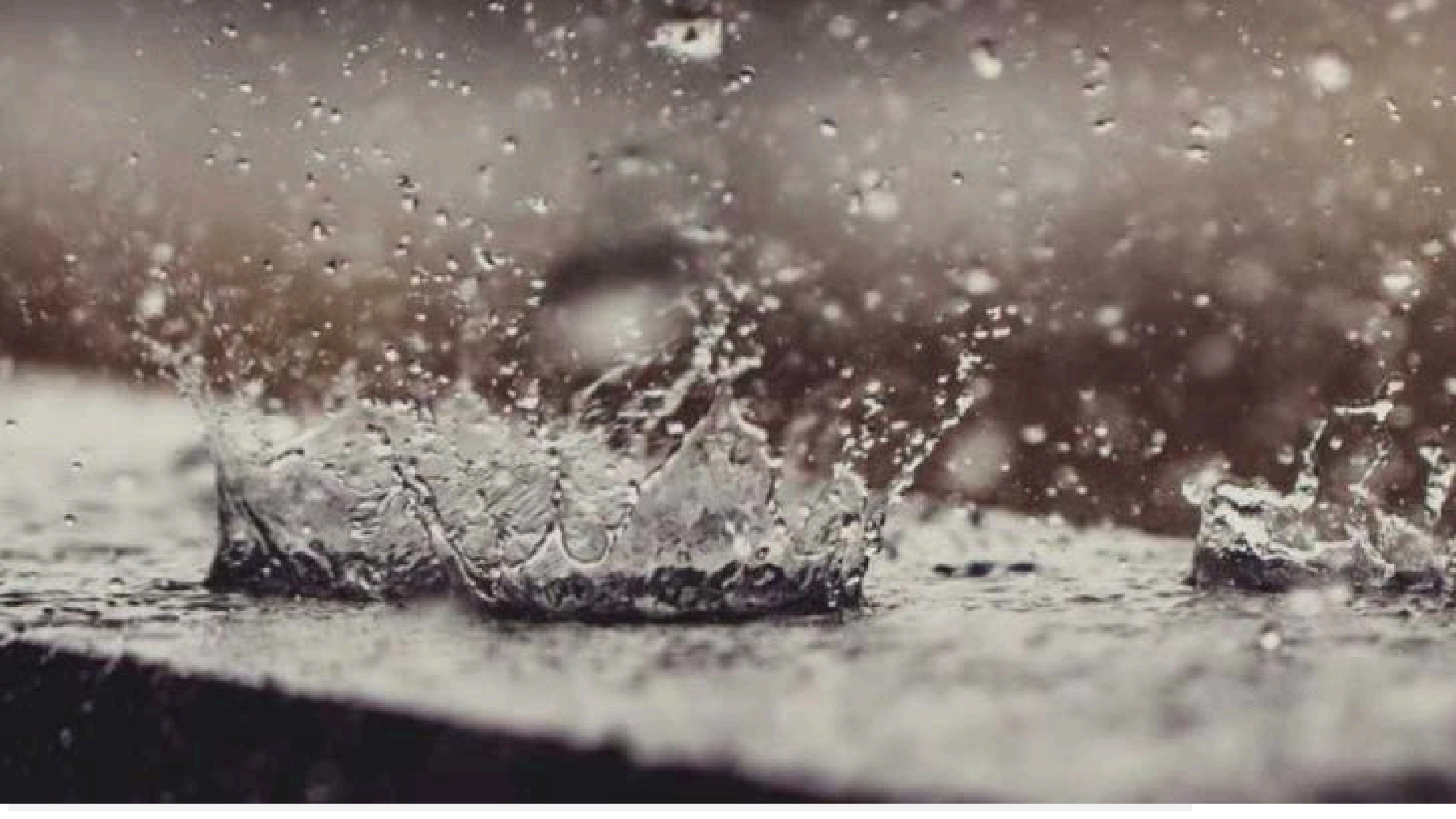












hydrogen

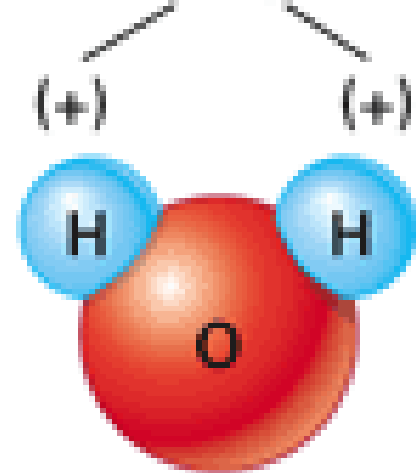
1

H

1.0079



Slight positive
charge



Slight negative
charge

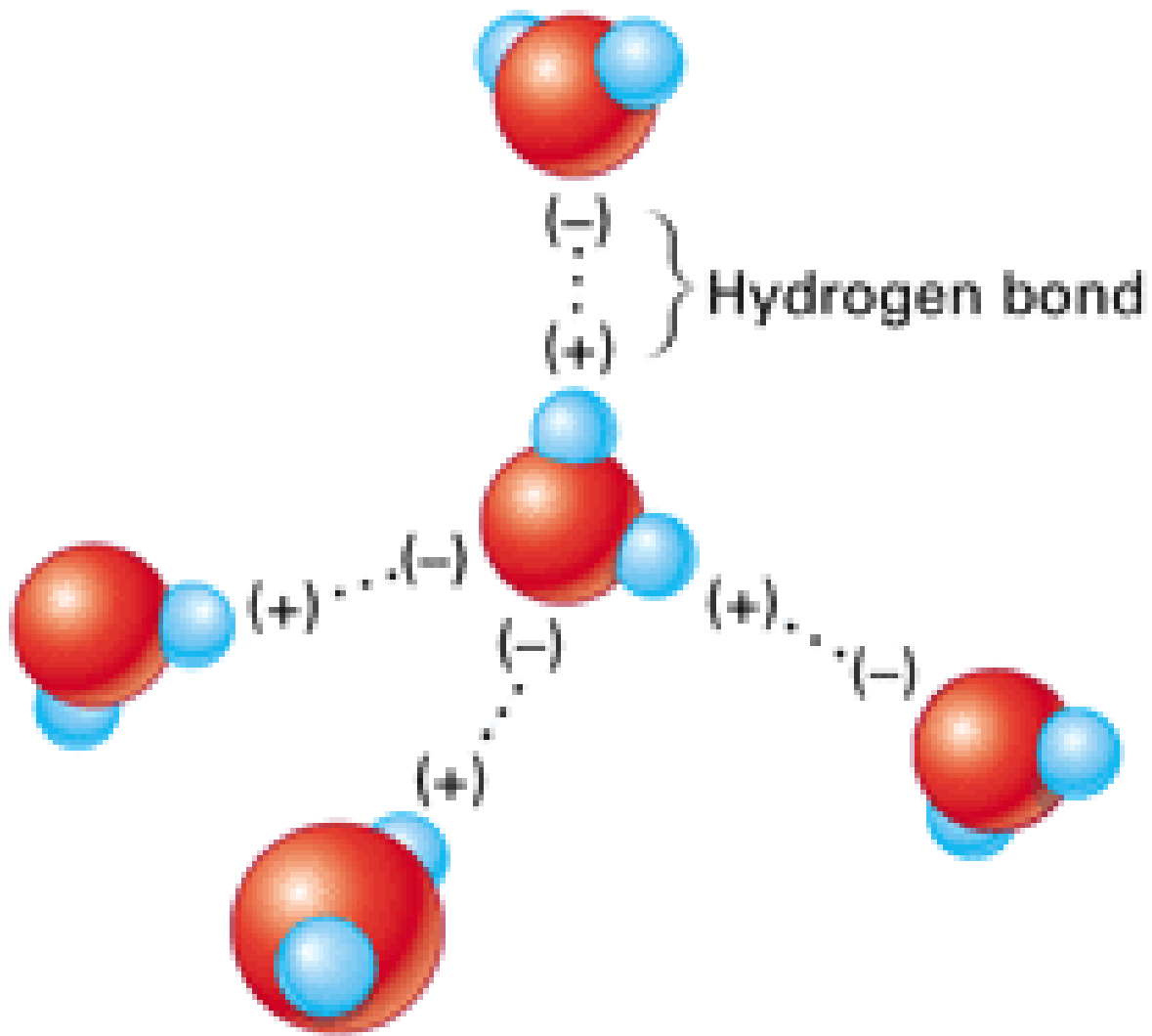
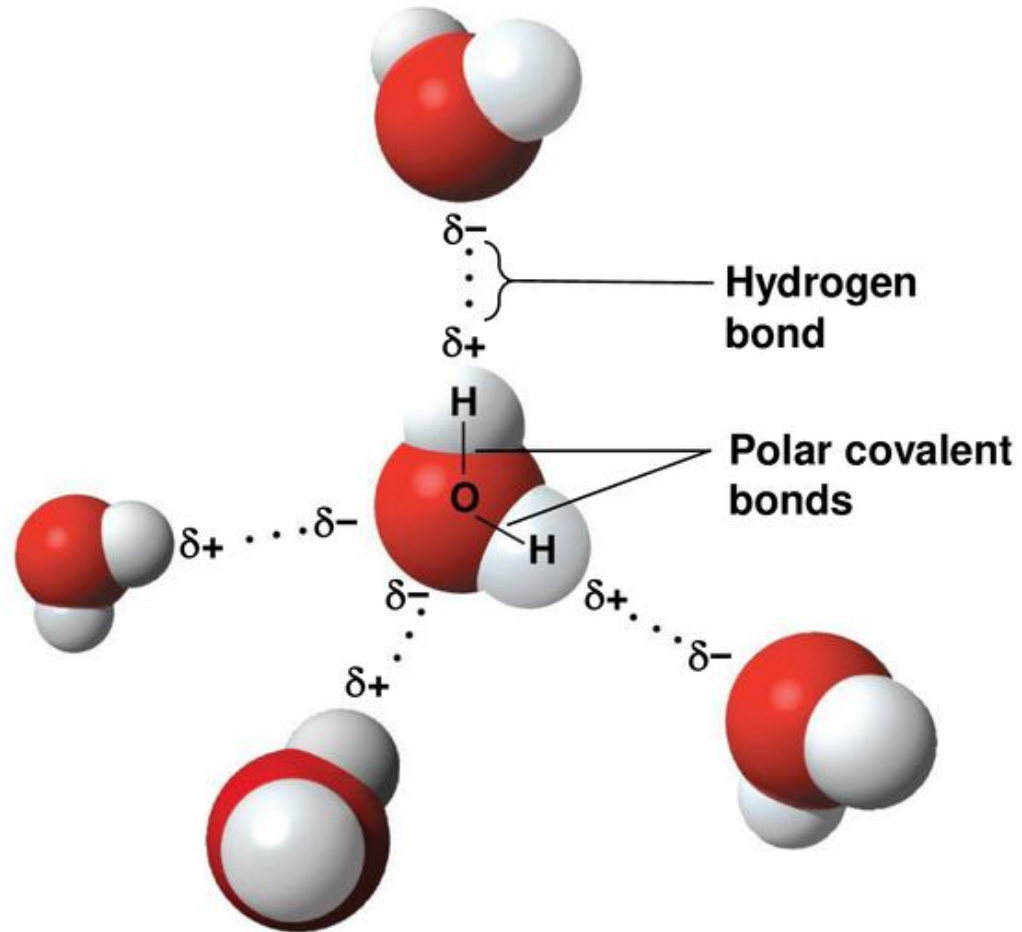
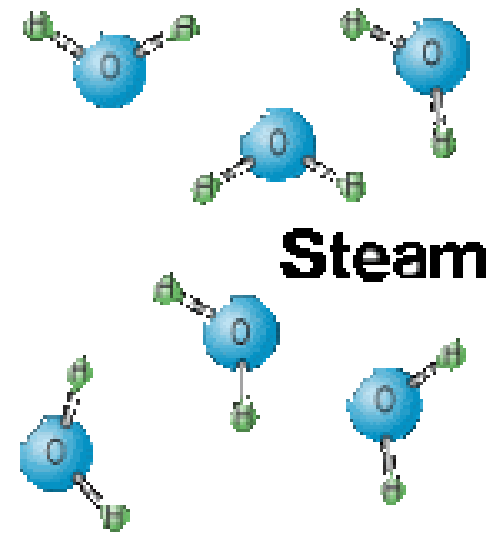
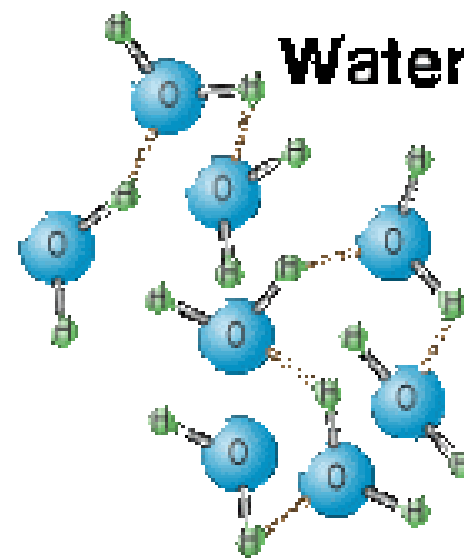
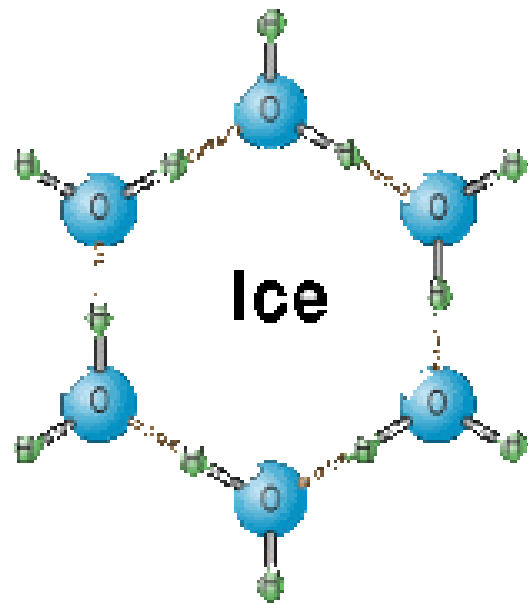


Figure 3.2

































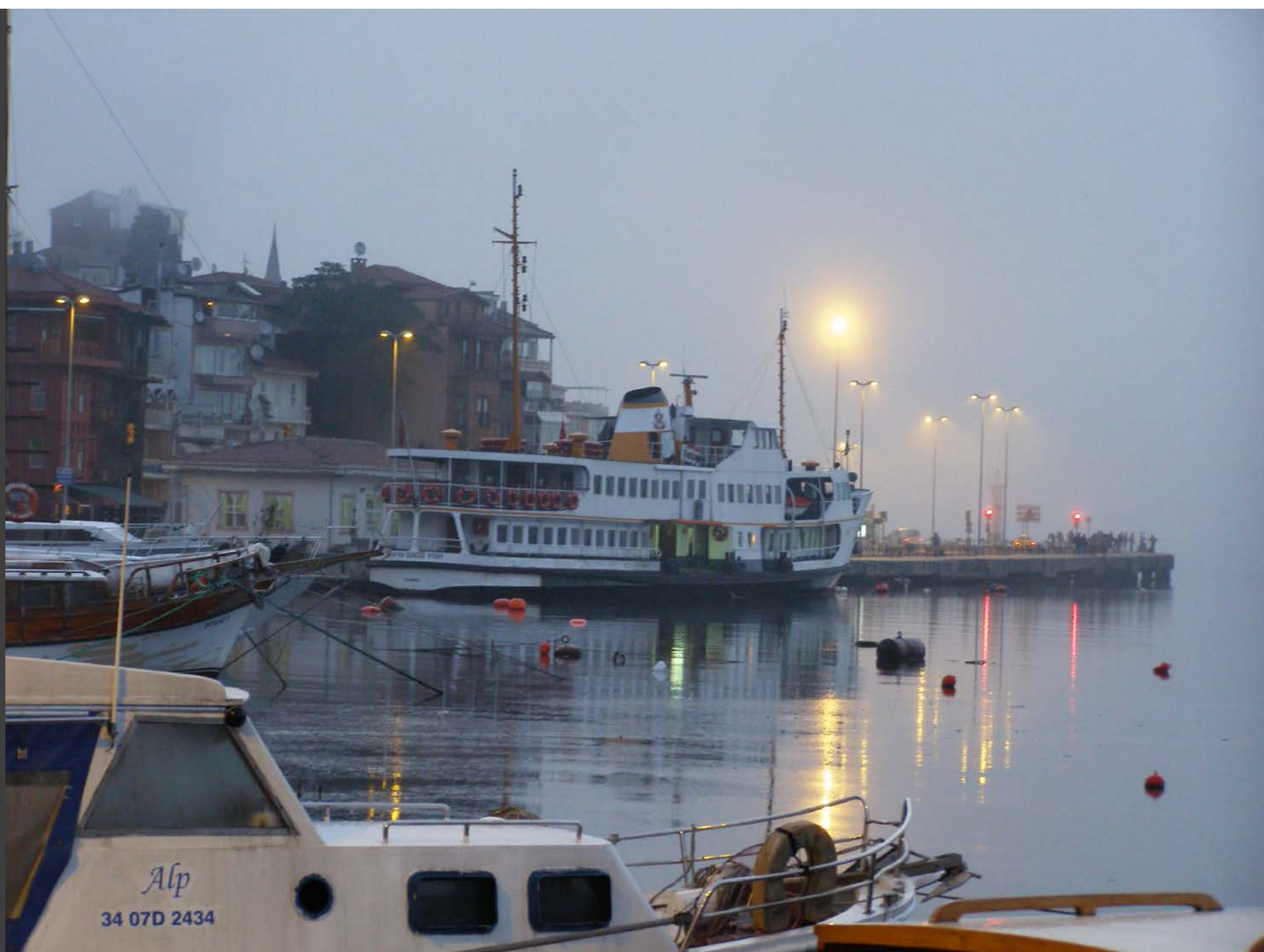






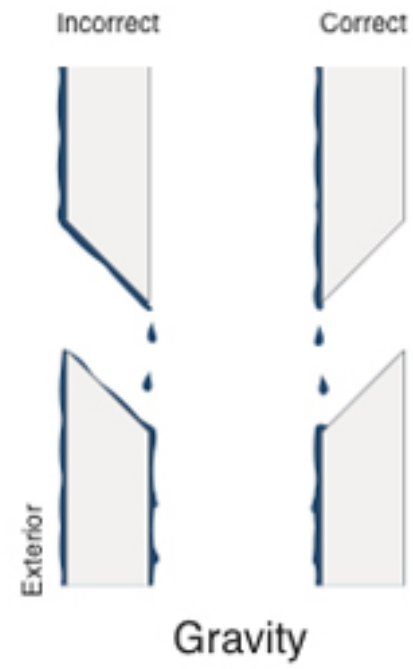
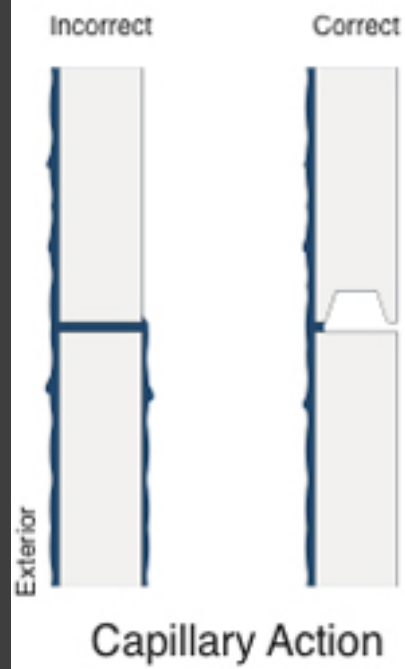
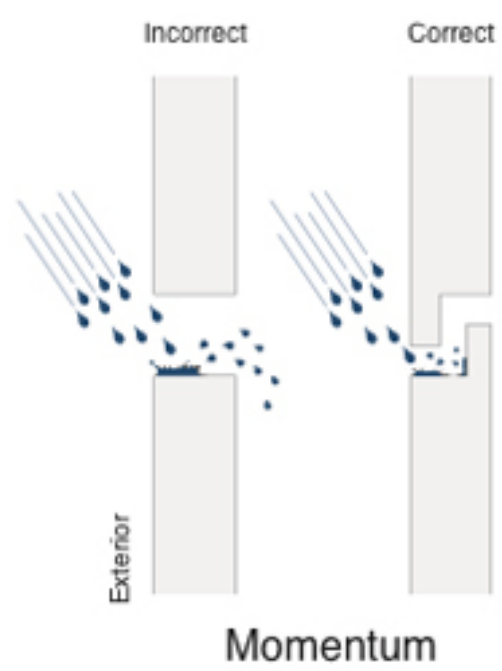




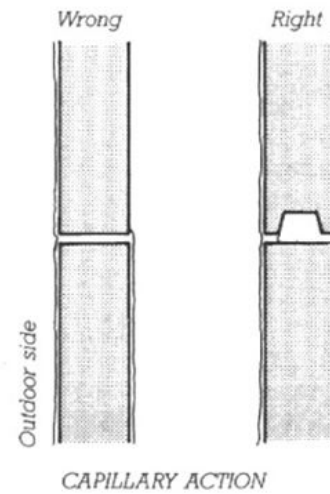
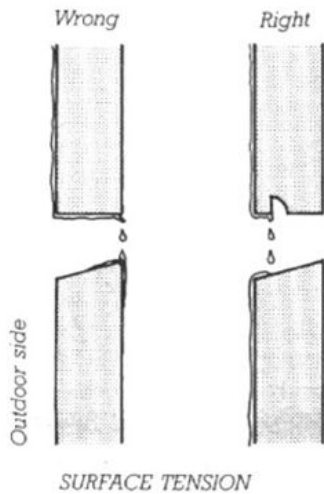
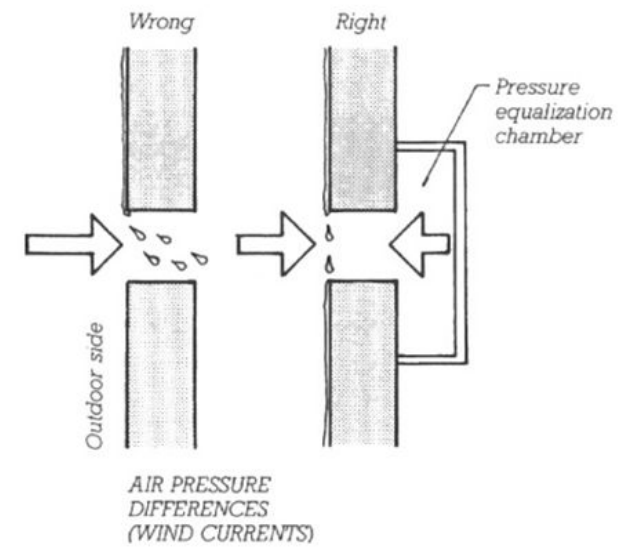
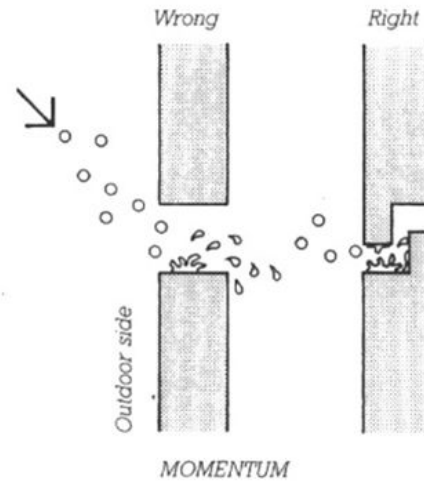
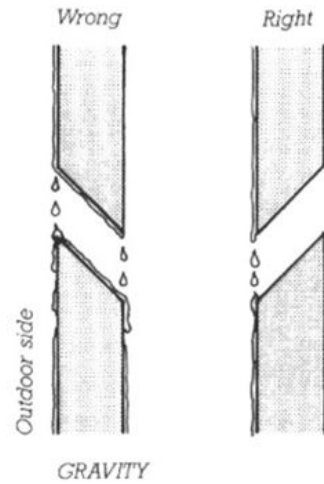




DETAY



Control rain penetration



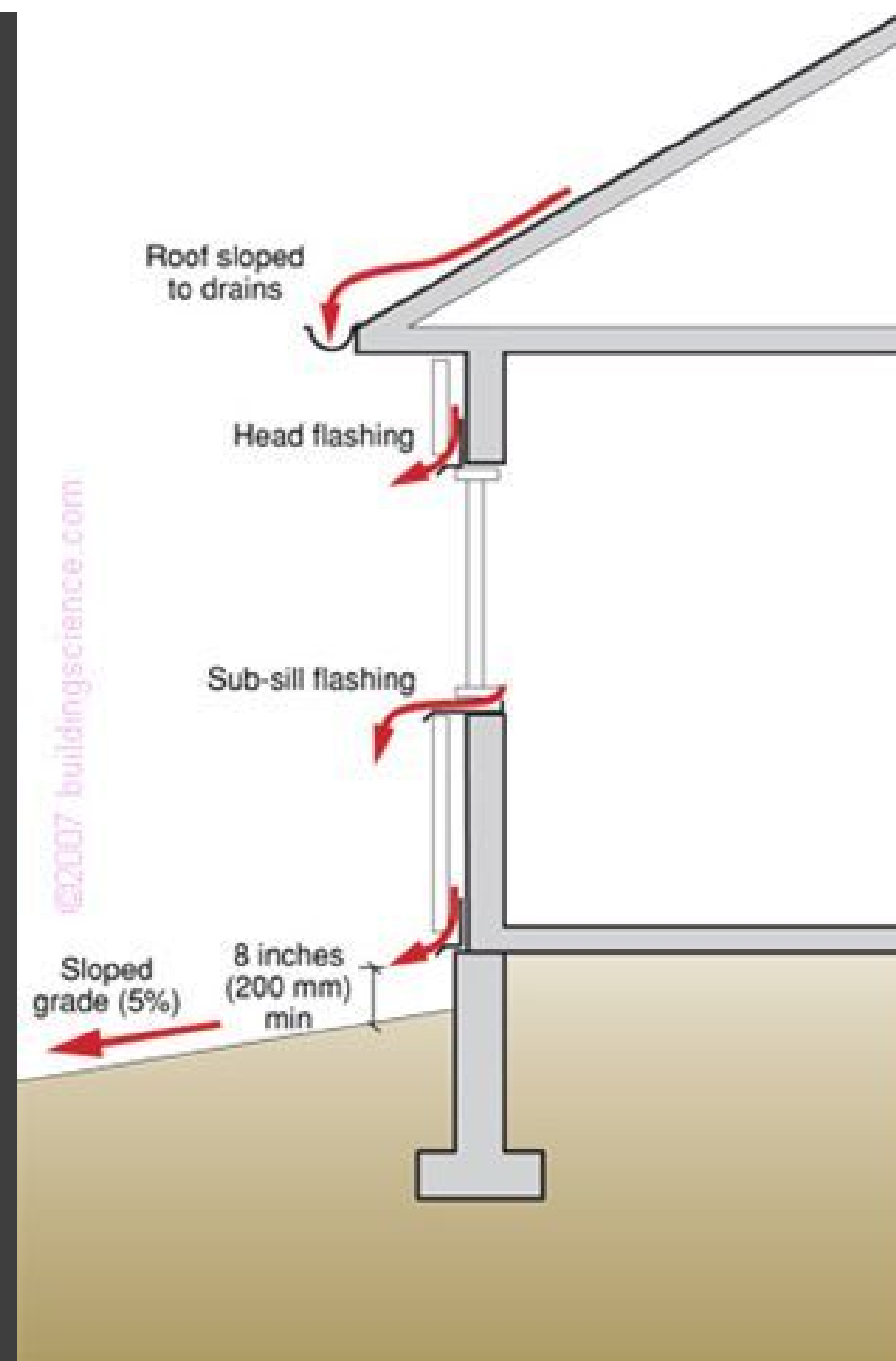
2) Ed Allen: Fundamentals of Building Construction











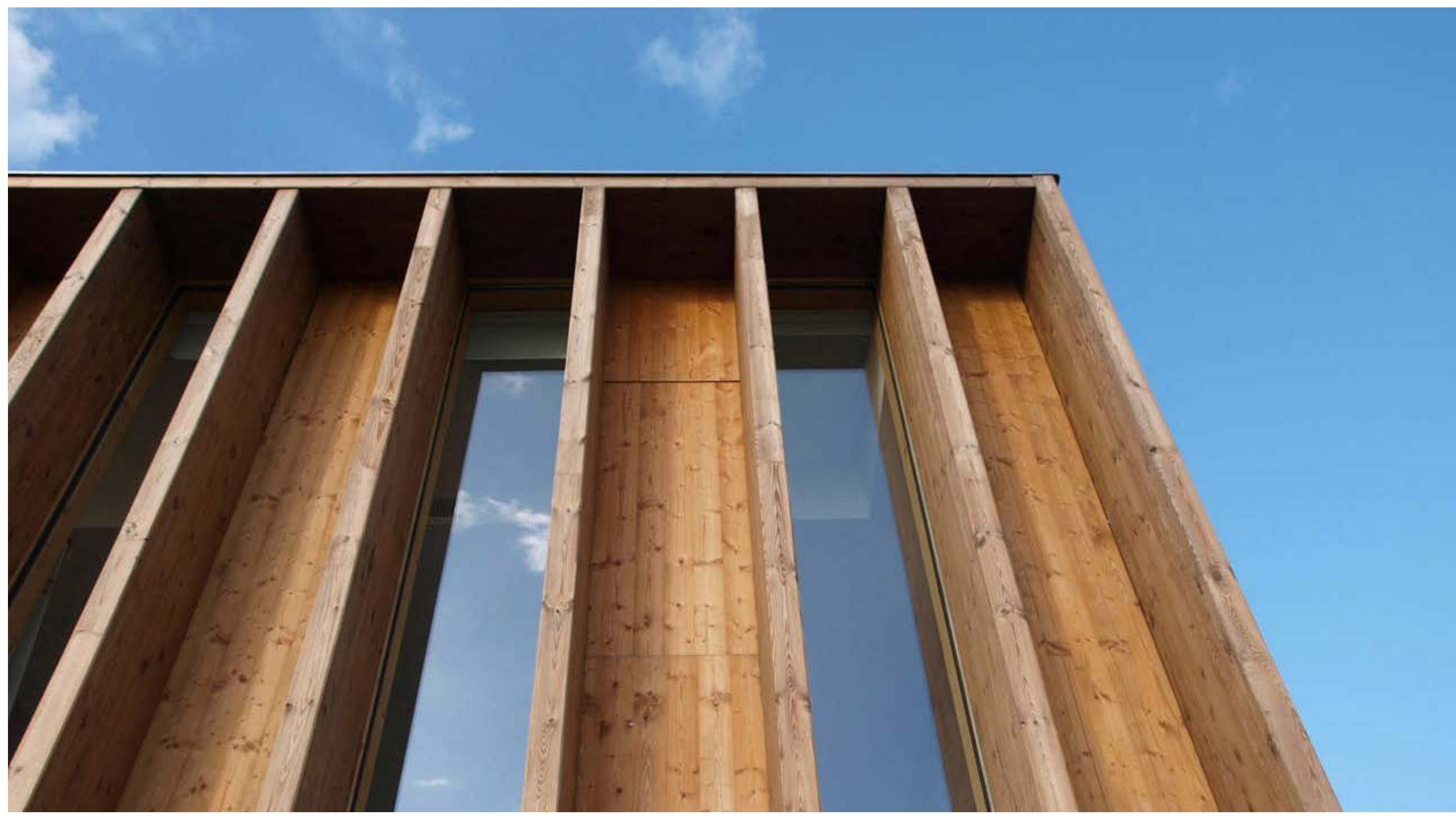
















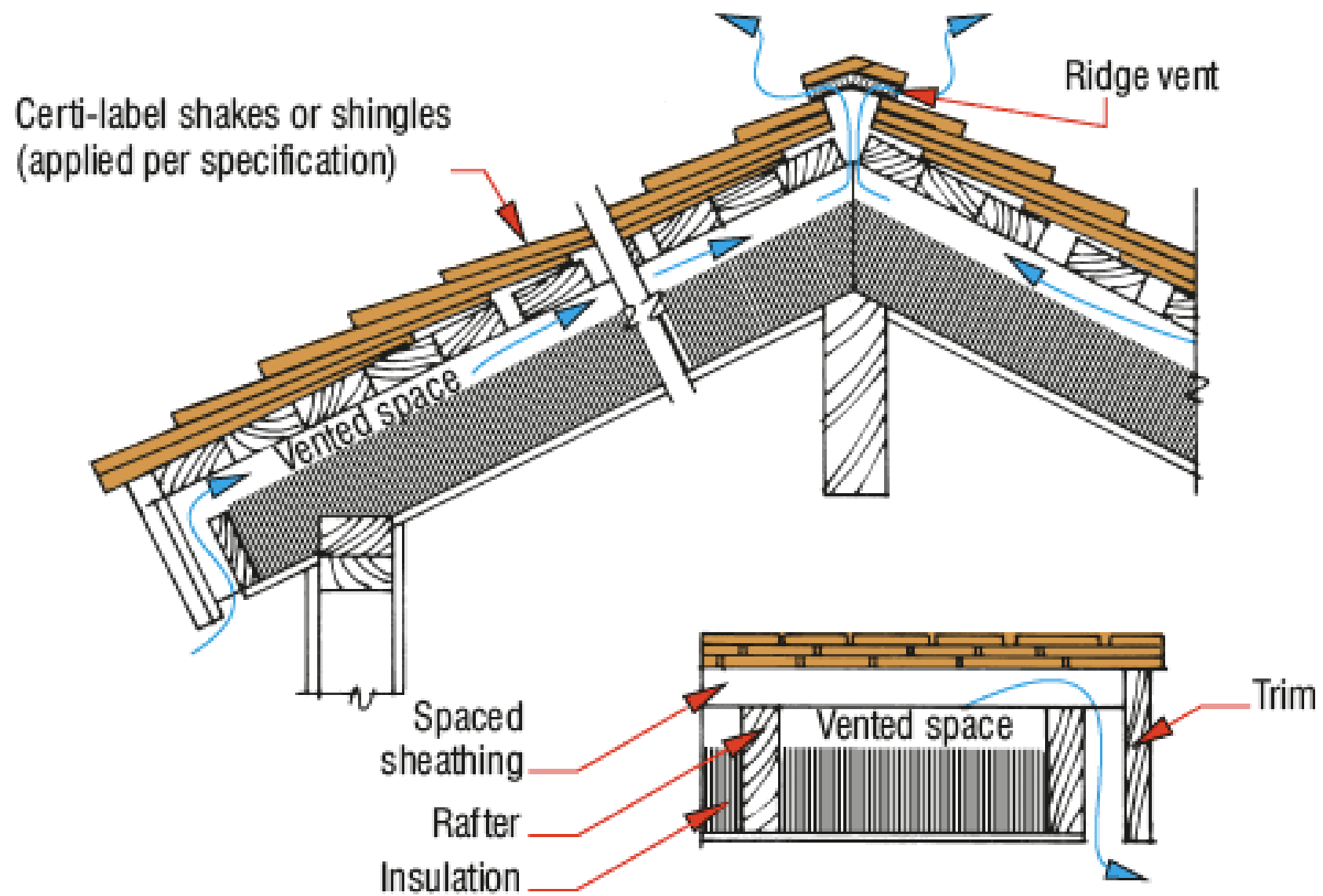
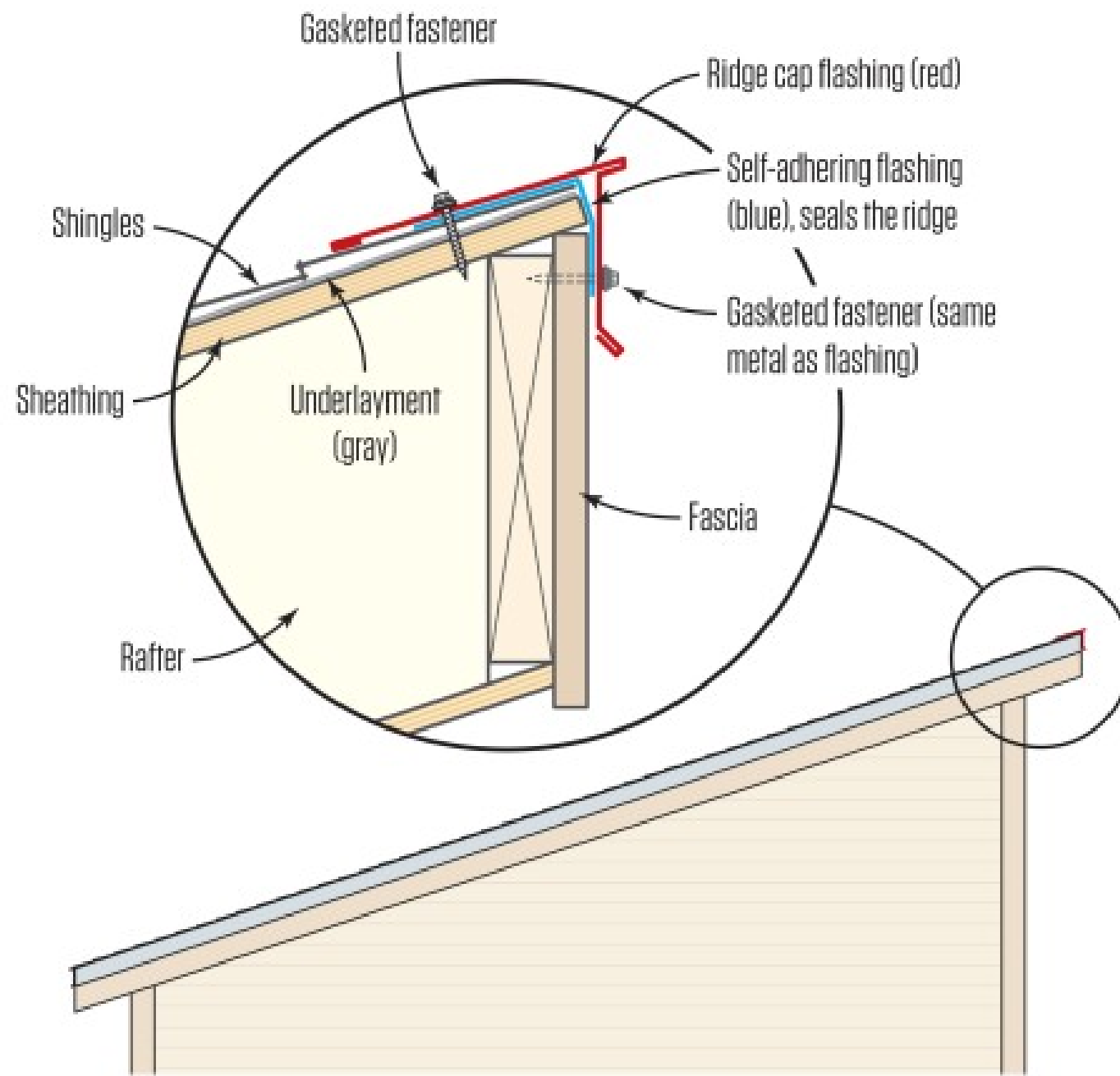


Figure 20: Gable Roof















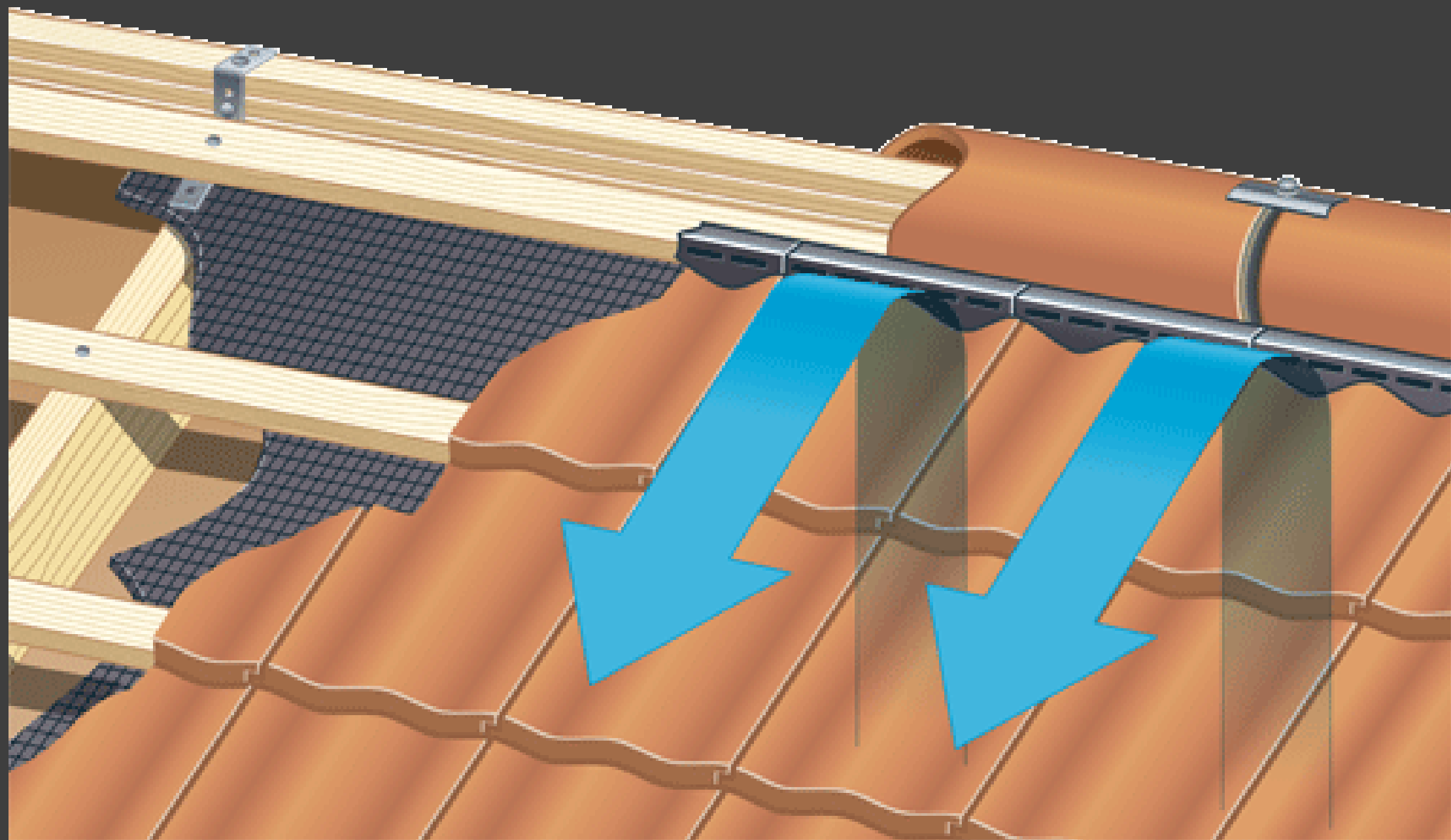


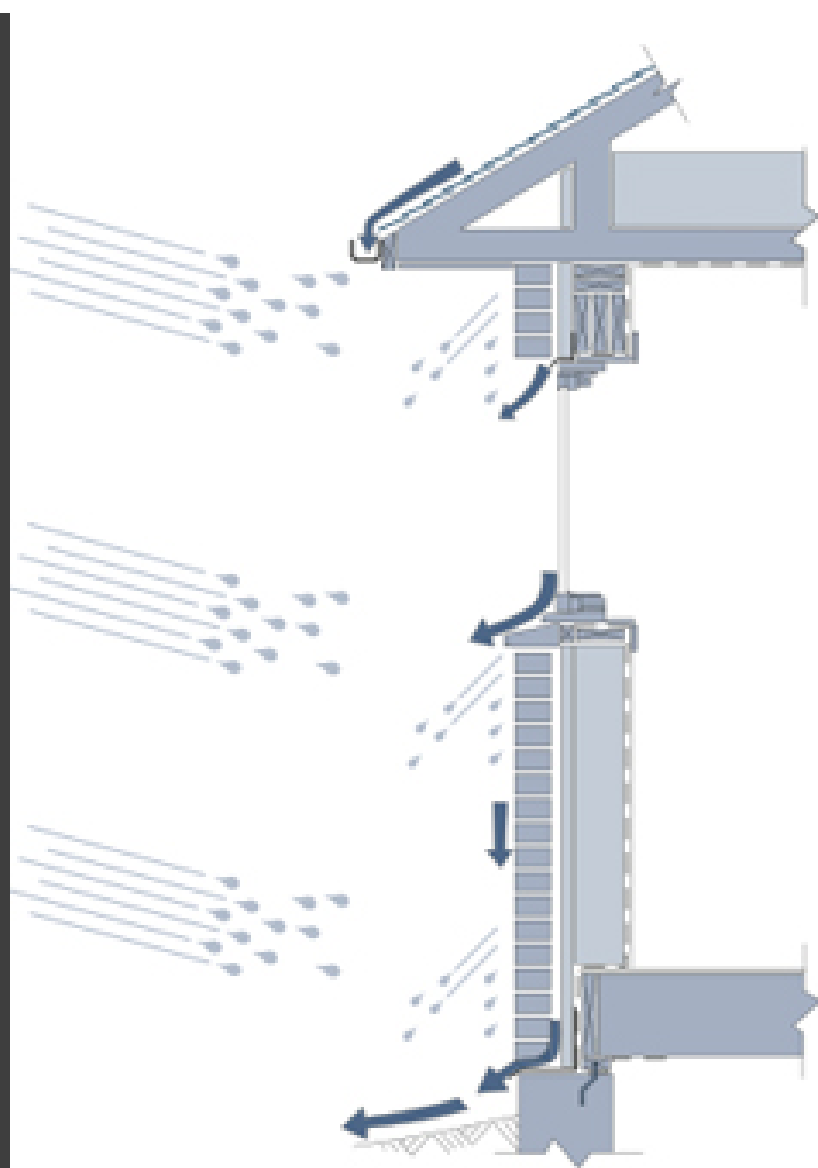




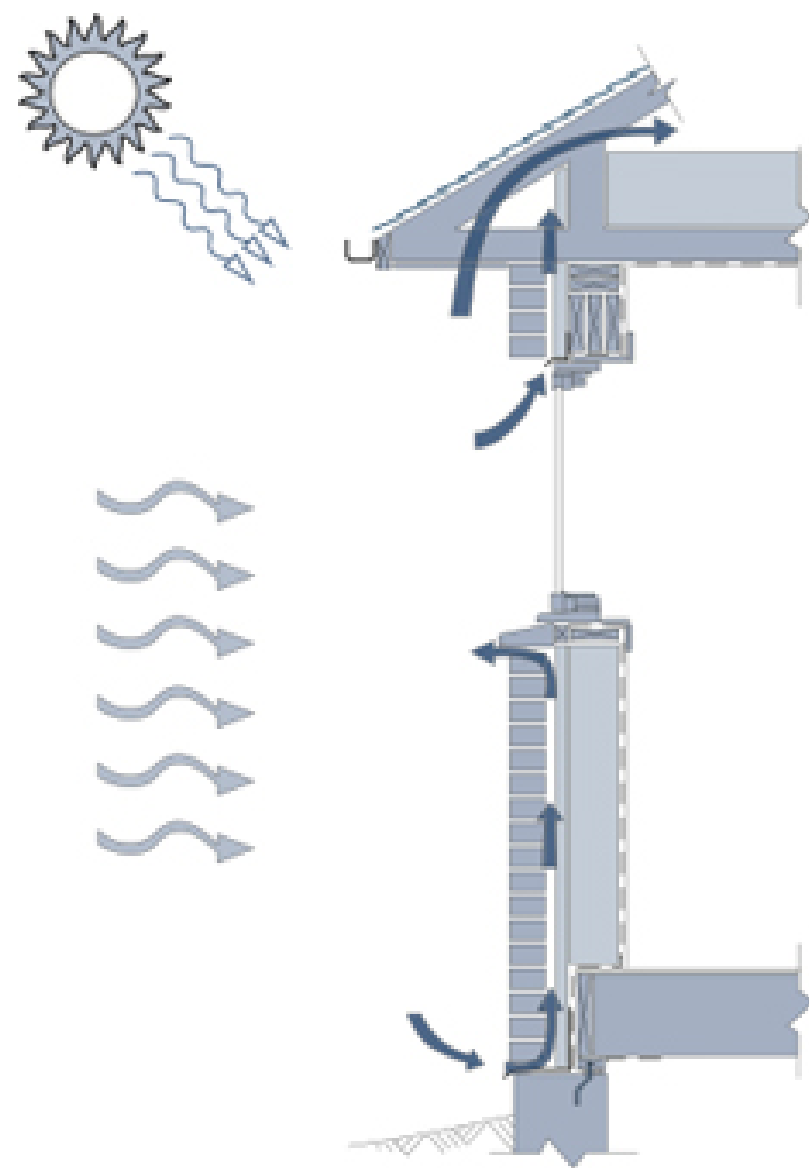








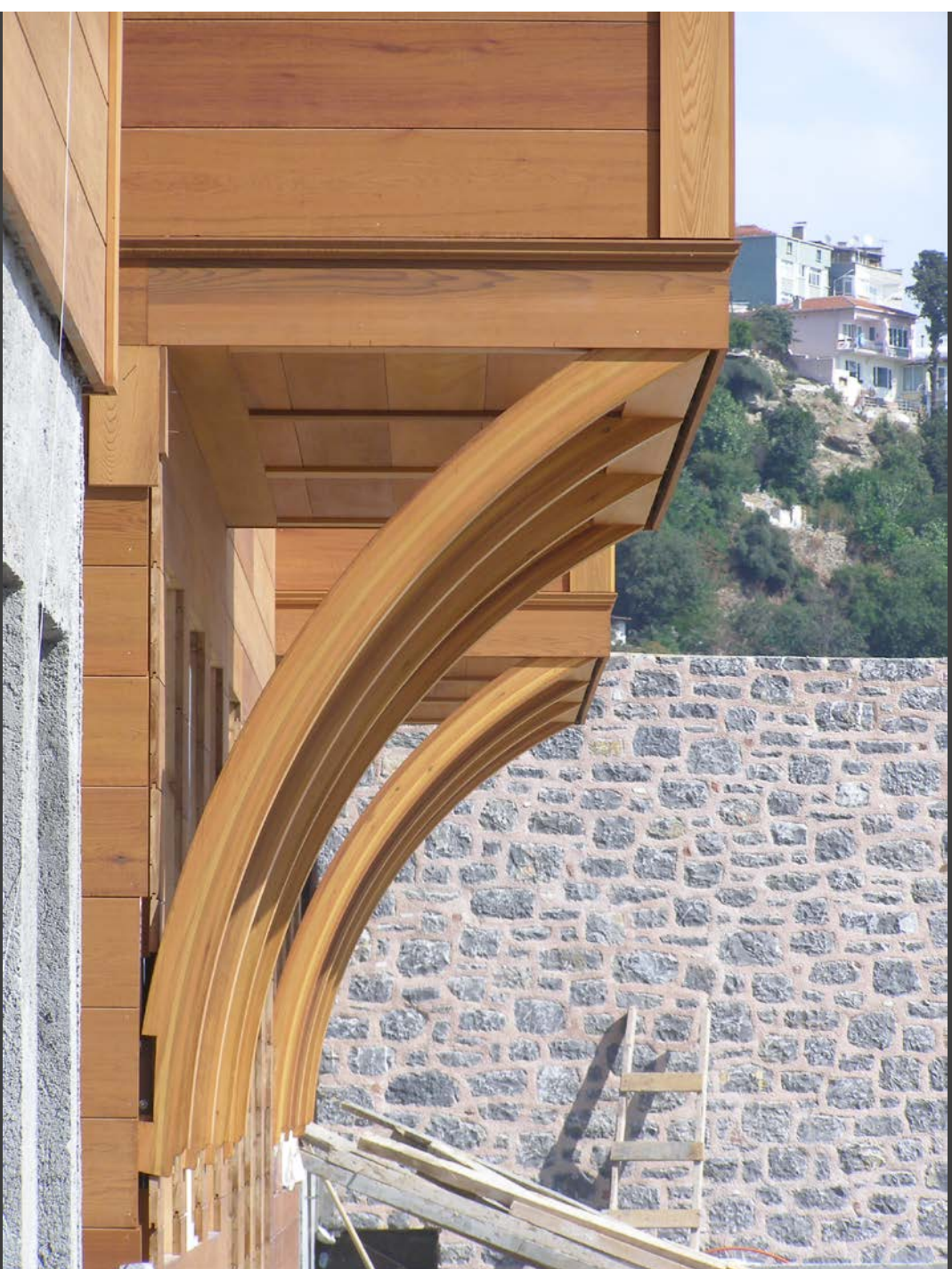
Roof overhangs, gutters, flashings, window and door sills serve to deflect water from the building enclosure. Air spaces and drainage planes (water resistive barriers) drain any water that penetrates the facade.



Drying can occur by ventilation (evaporation) or diffusion (to the exterior or interior). Research indicates the provision of a ventilated cladding system promotes effective drying. When combined with materials that can withstand periodic wetting, the result is a dry and durable enclosure.























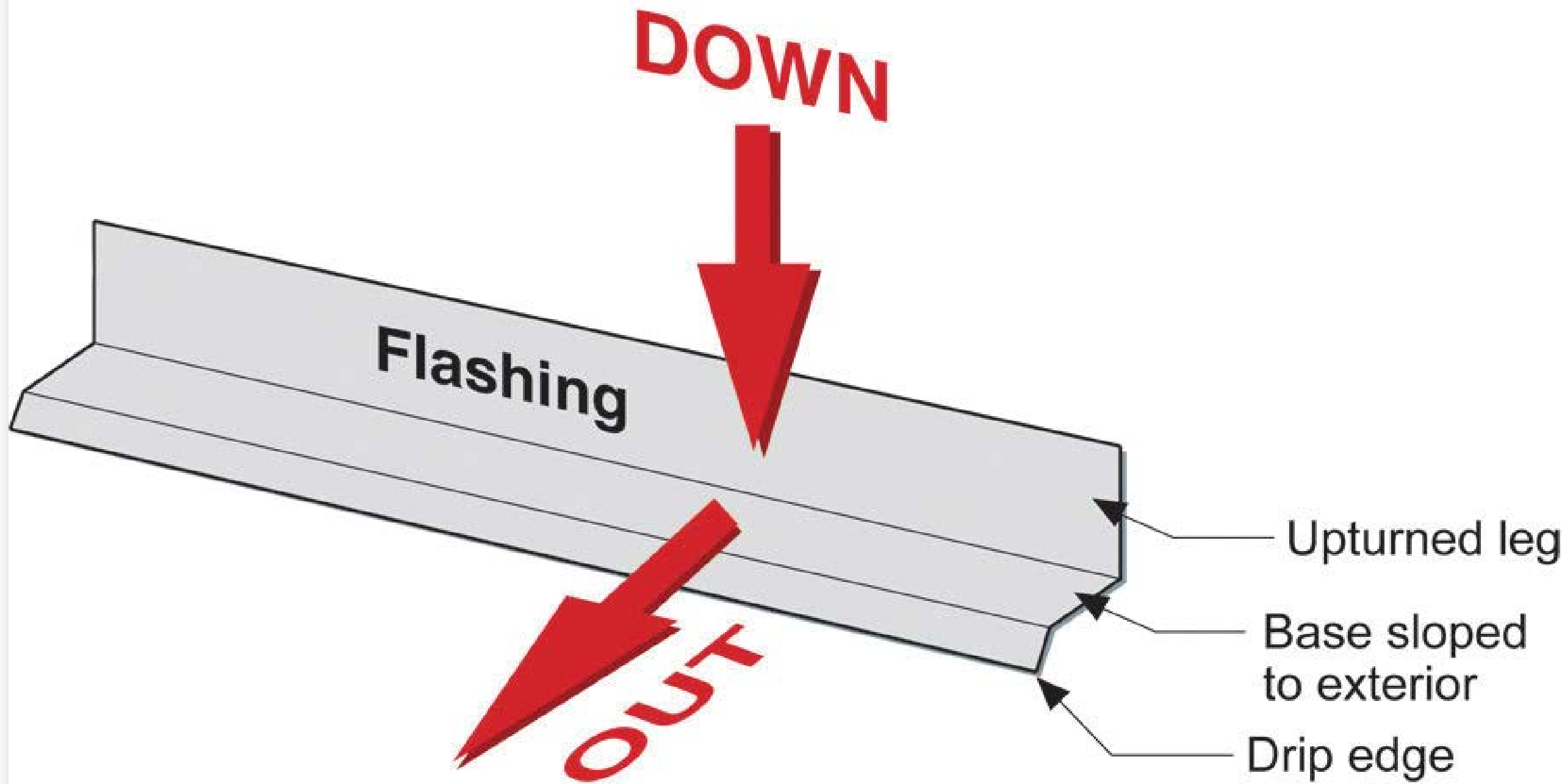
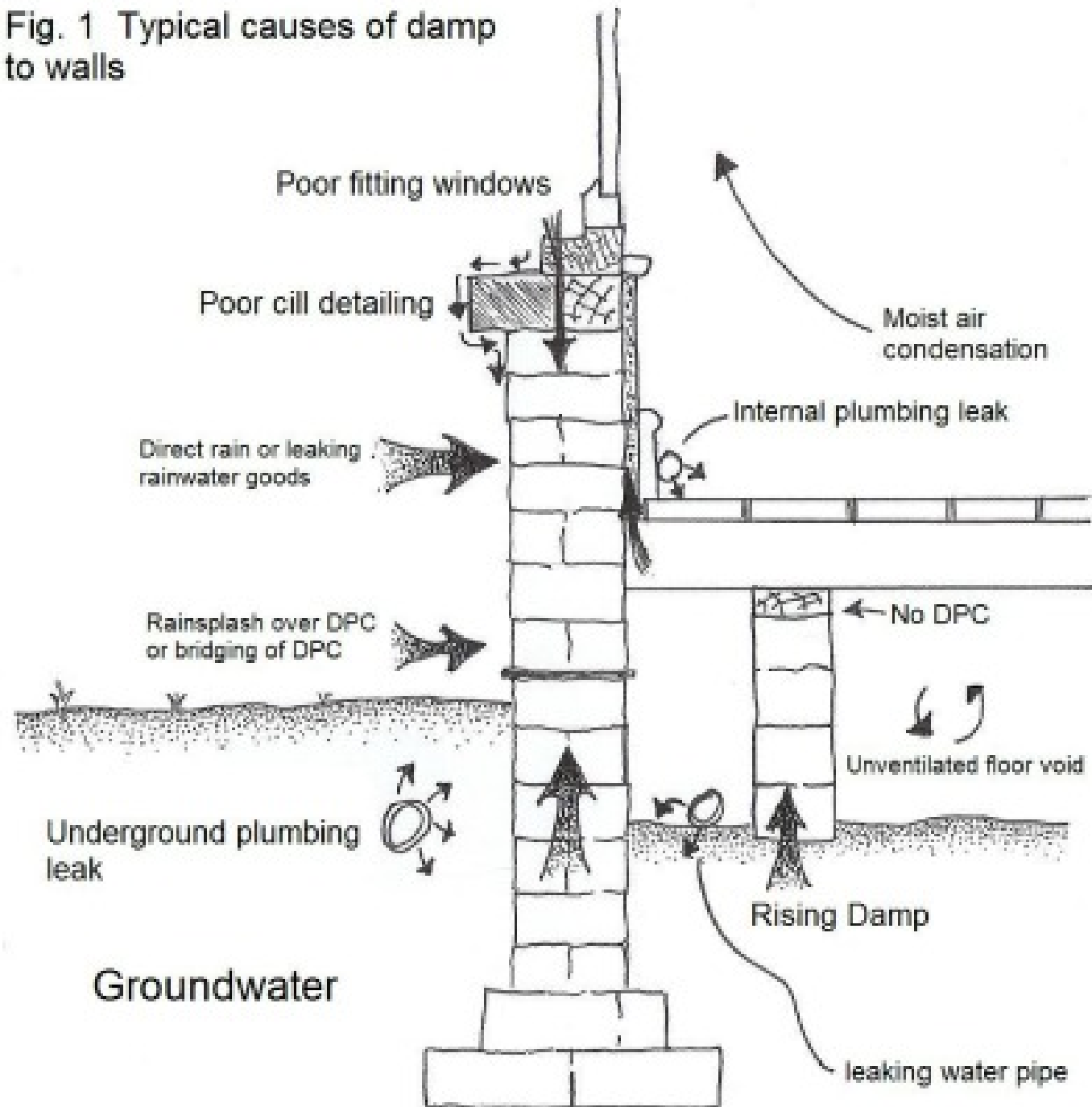
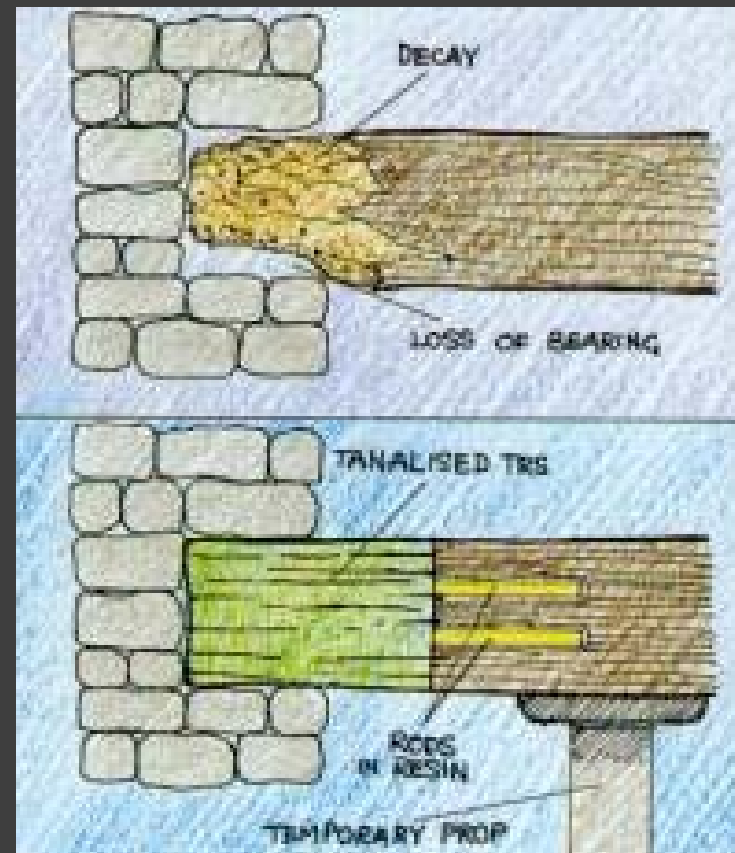




Fig. 1 Typical causes of damp to walls

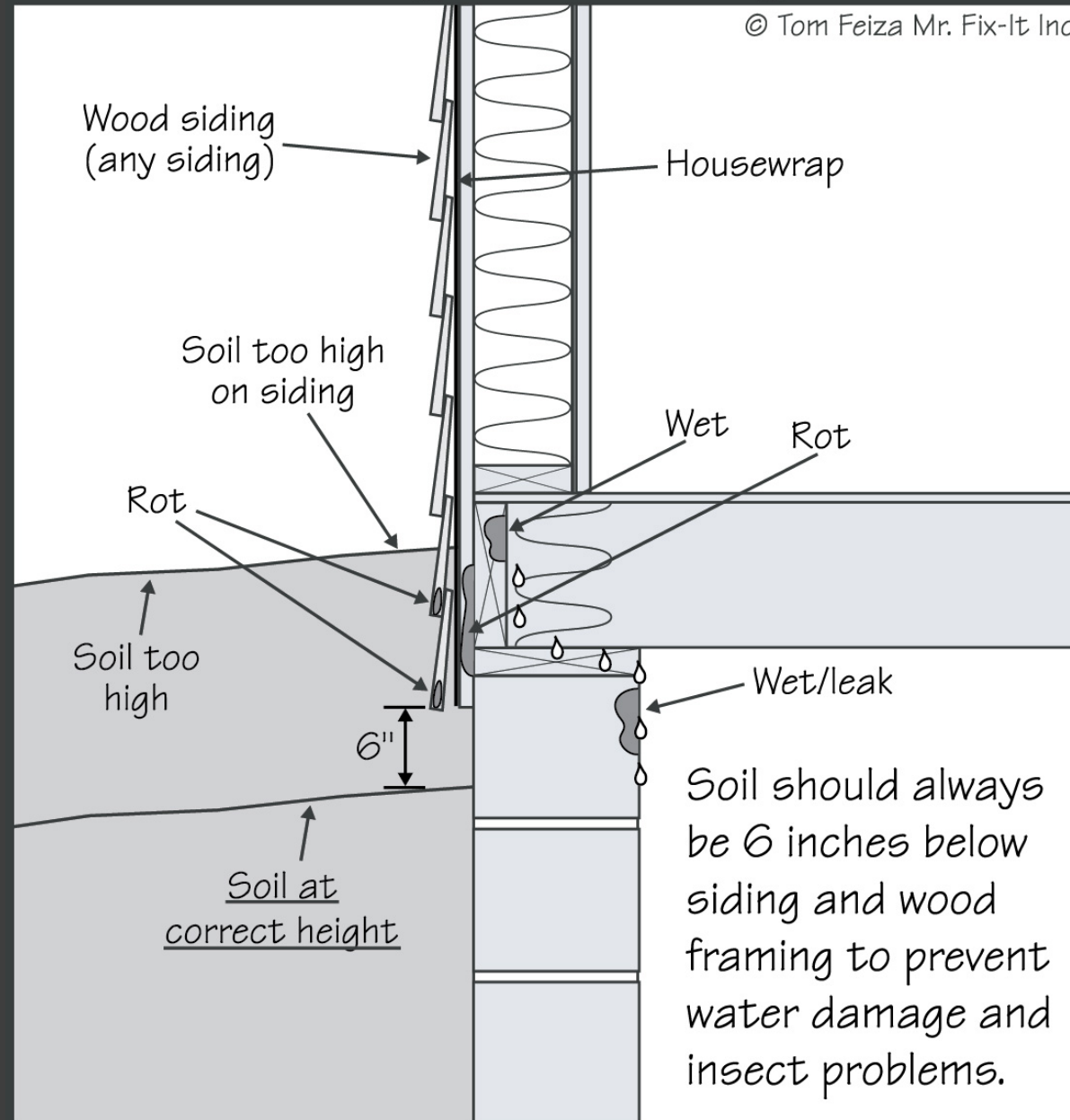






Grading - Soil Too High

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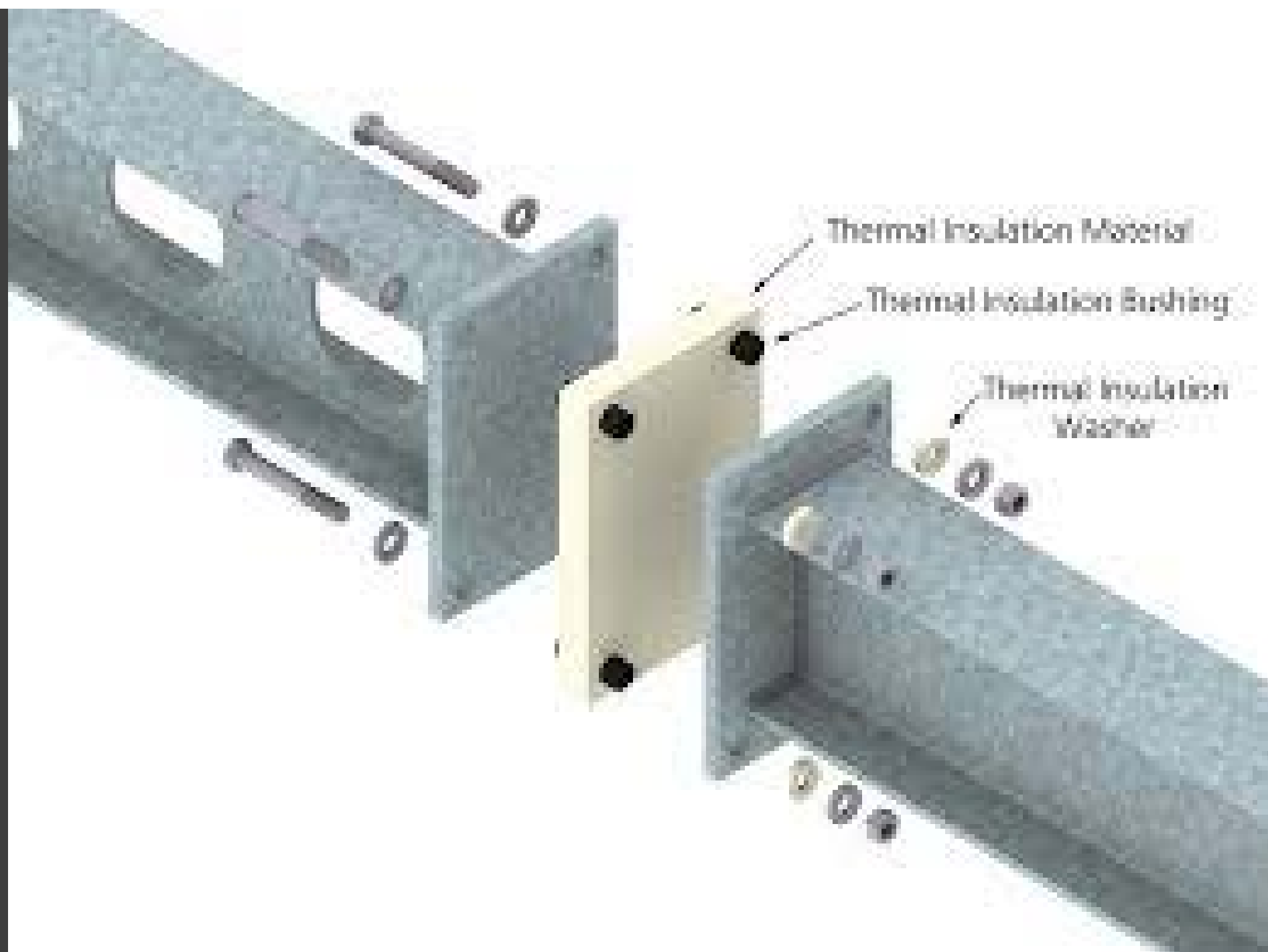




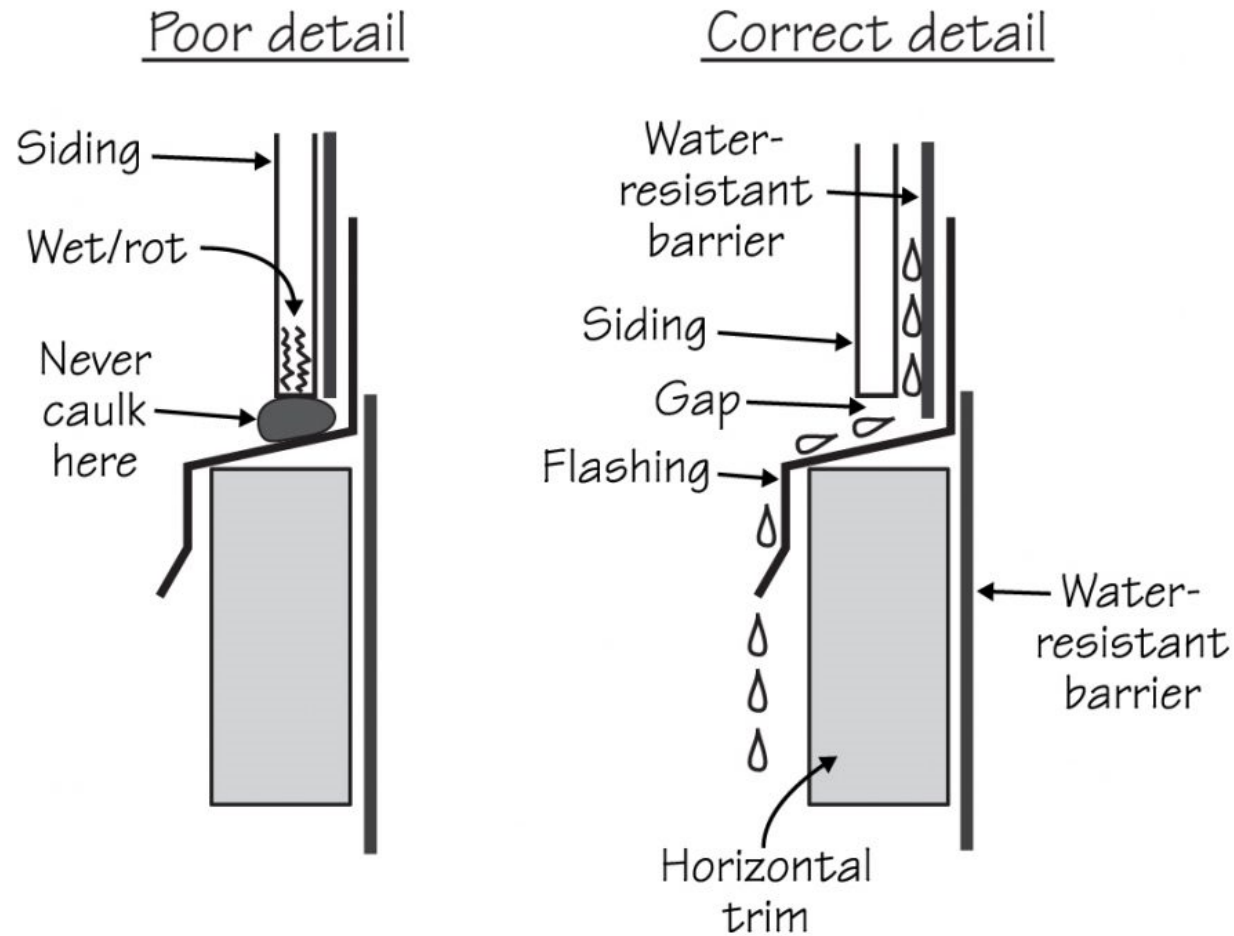






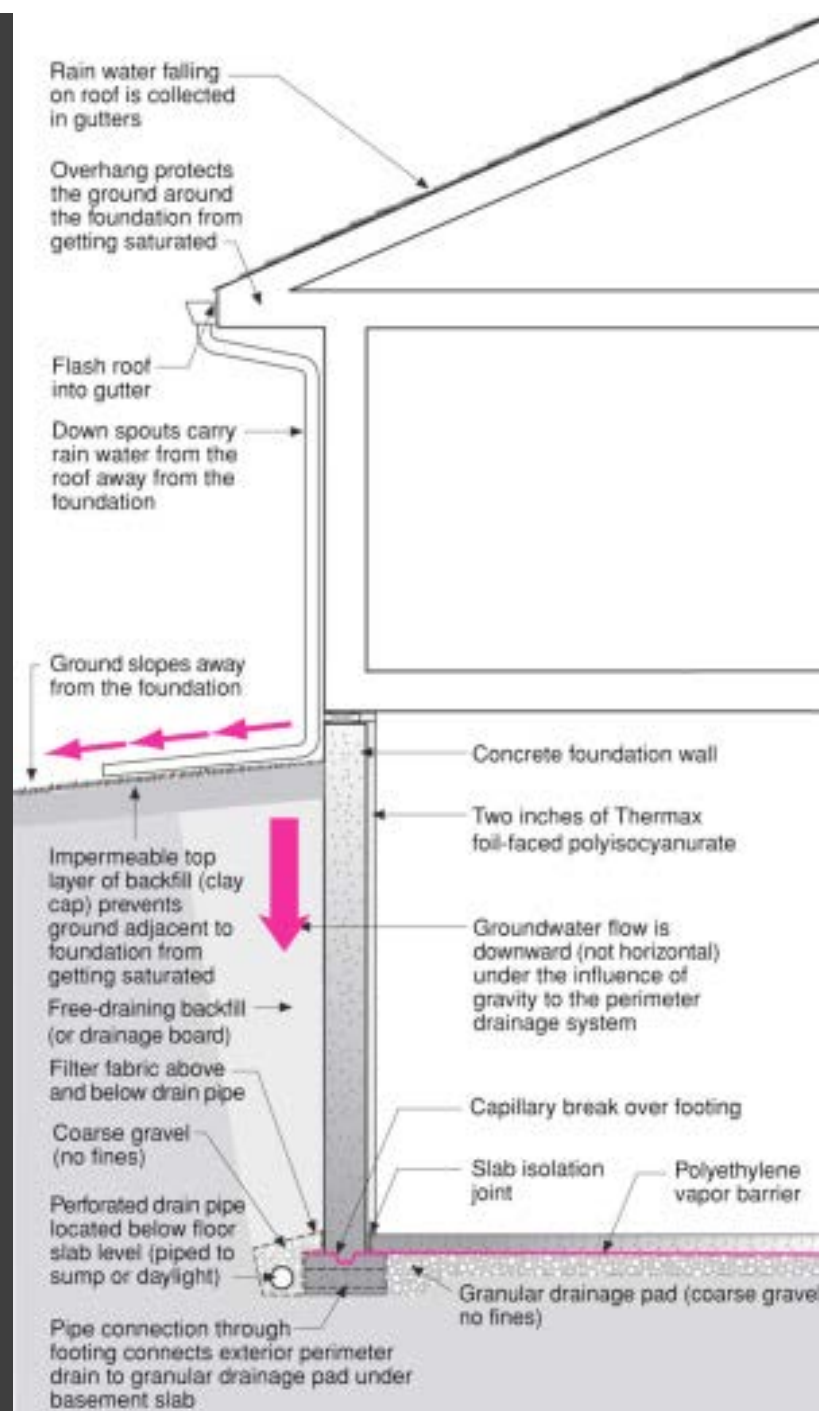


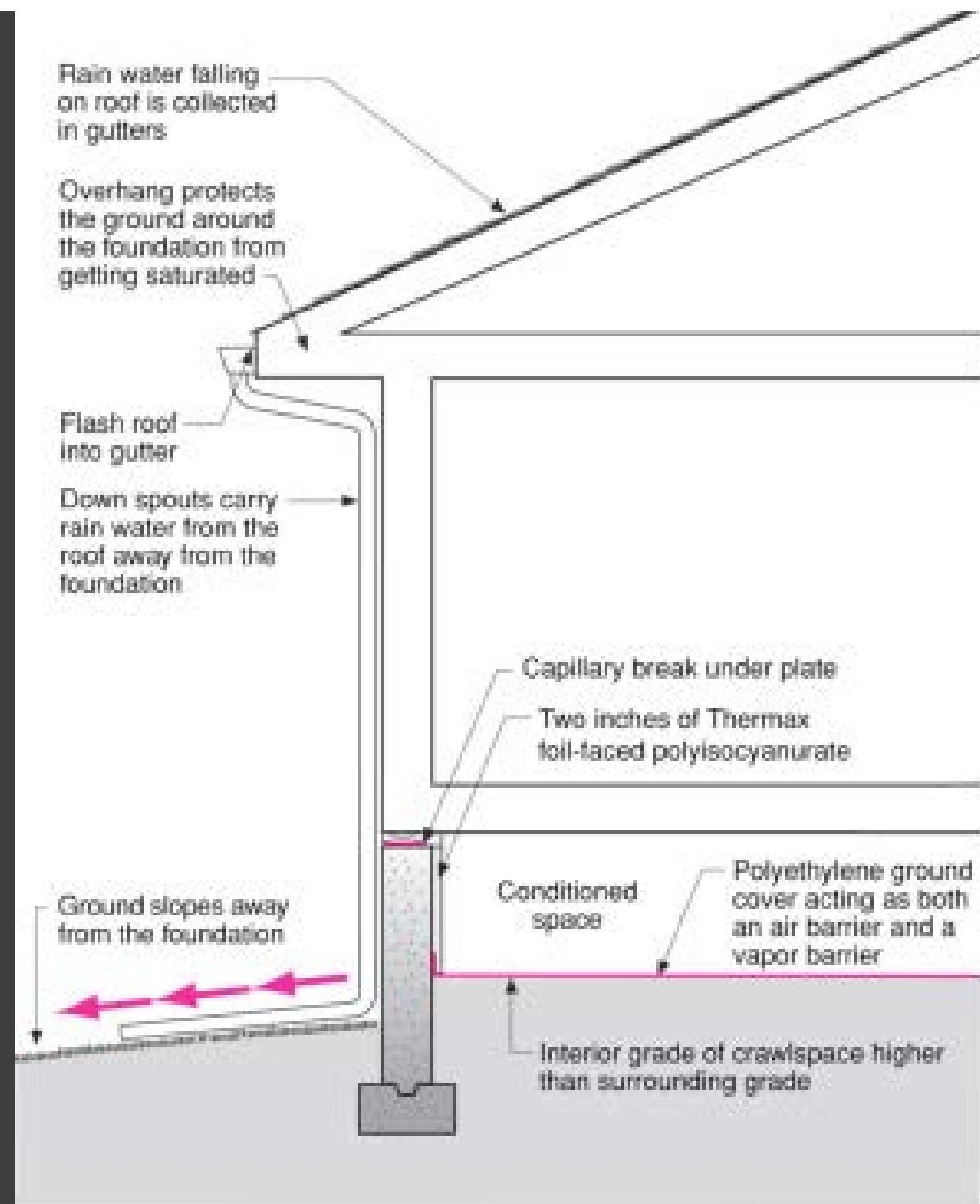
Cap Flashing Details #2



Cap or head flashings and horizontal trim should never be caulked. Caulking traps water.

© Tom Feiza Mr. Fix-It Inc.

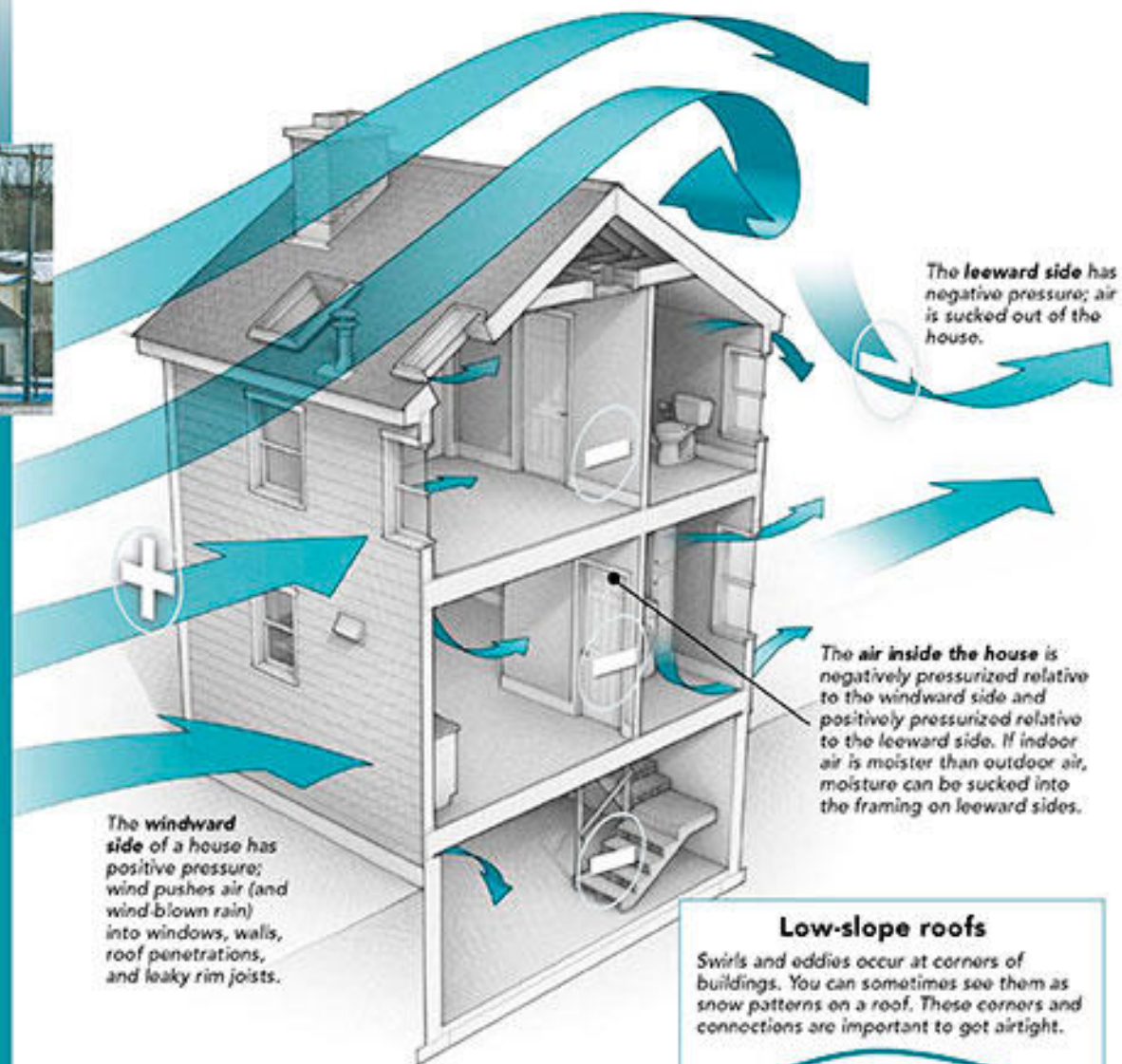




Wind

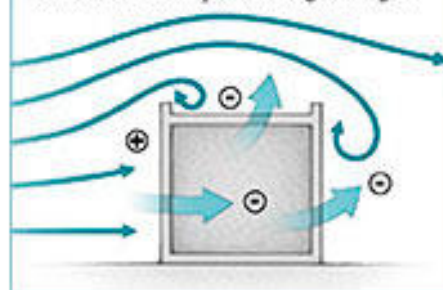


The wind that pushes air into one side of a house also sucks it out the other side. If the outdoor air is moister than the indoor air, water can be driven into framing on windward sides. On a gusty winter day, the pattern of wind pressure can be seen as swirls around corners and edges that sweep snow from specific areas. It is important to have good air-barrier details where roofs, walls, floors, and foundations meet.



Low-slope roofs

Swirls and eddies occur at corners of buildings. You can sometimes see them as snow patterns on a roof. These corners and connections are important to get airtight.

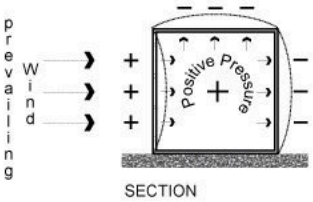
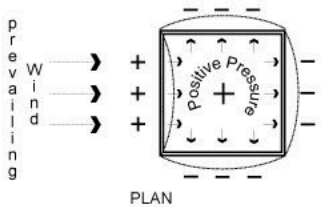


WIND PRESSURE MITIGATION

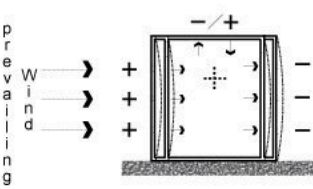
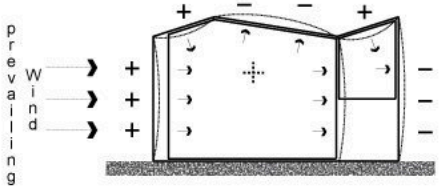
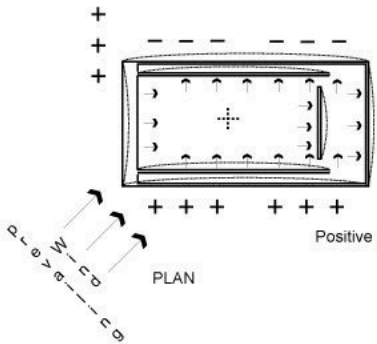
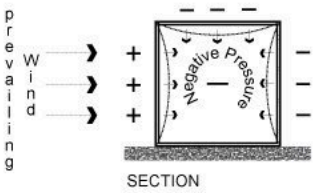
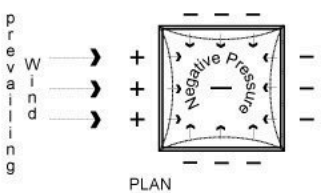
WIND PRESSURE EFFECTS

Arrows indicate direction of applied force

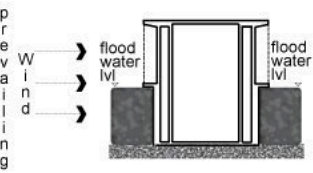
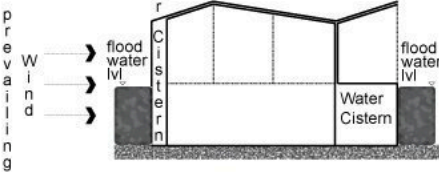
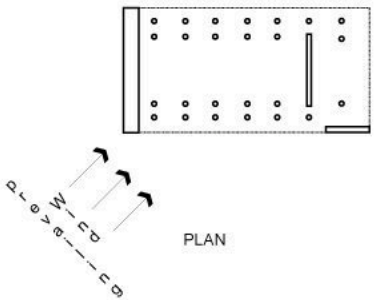
WITH GREATER WALL POROSITY
ON WINDWARD SIDE
Positive air pressure builds up inside
building, tending to lift roof
and blow out walls



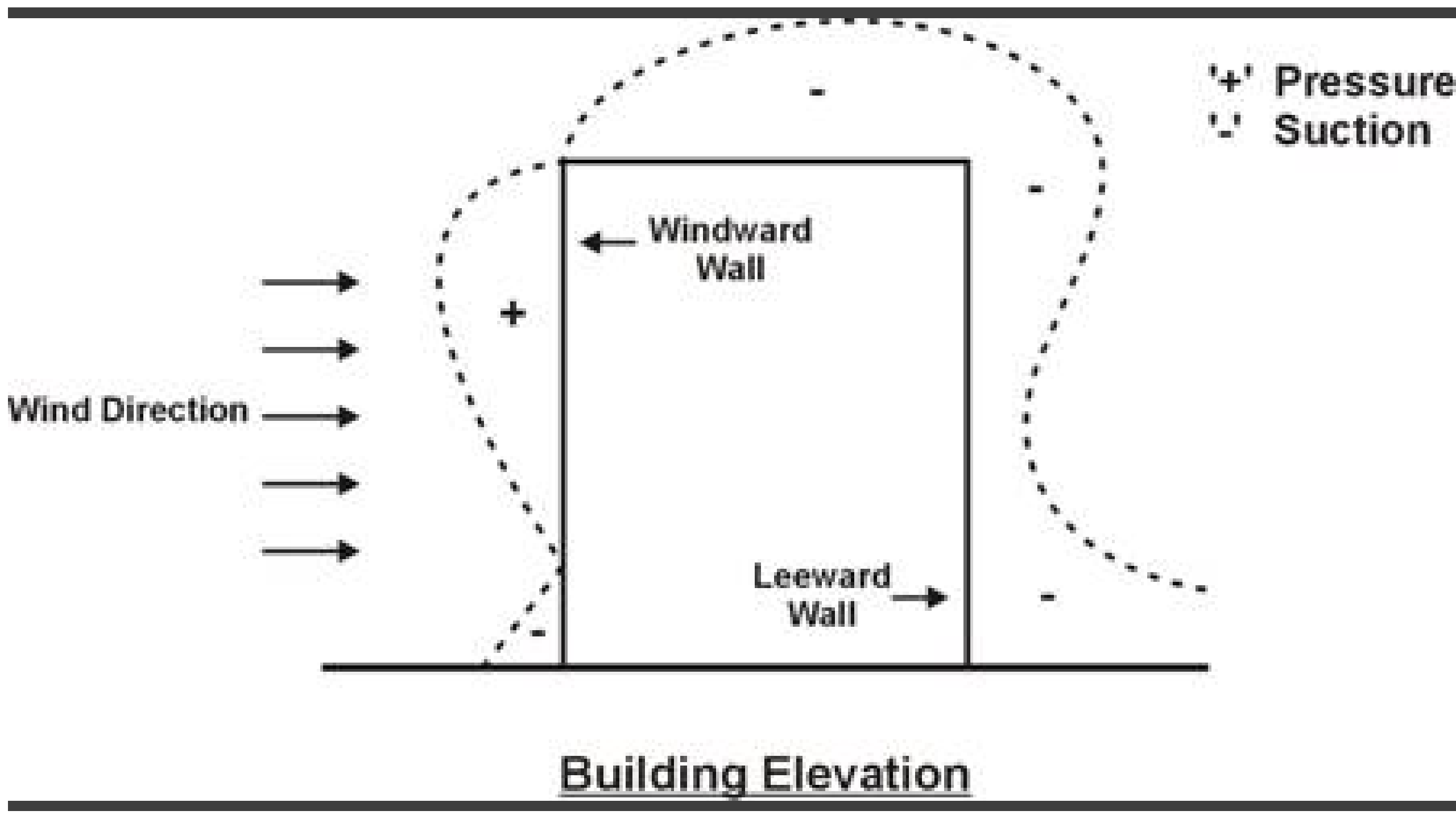
WITH GREATER WALL POROSITY
ON LEEWARD SIDE
Negative air pressure builds up inside
building, tending to collapse roof
and walls



Positive Pressure neutralized by porous external wall surfaces in longitudinal direction

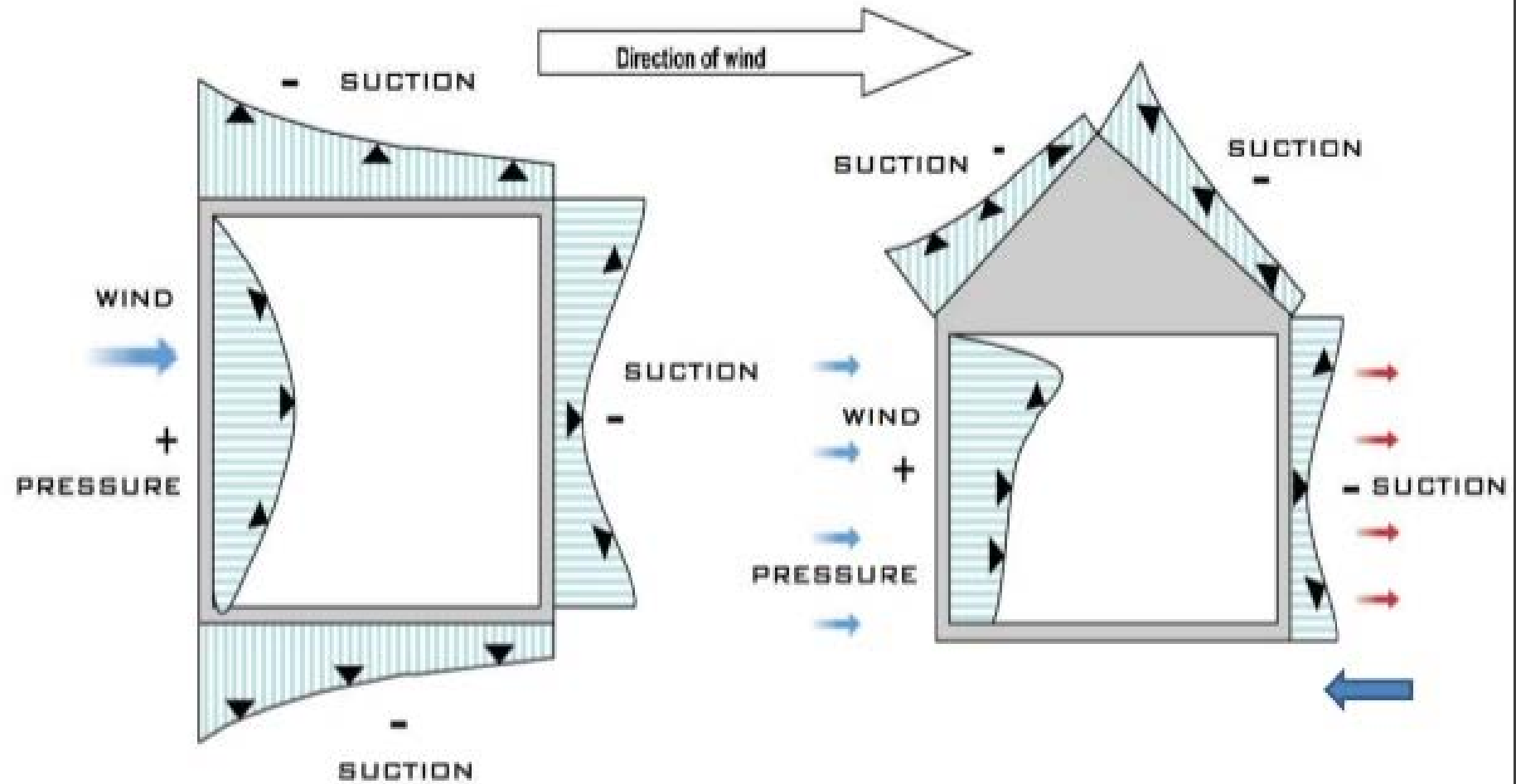


STRUCTURE



PLAN

ELEVATION



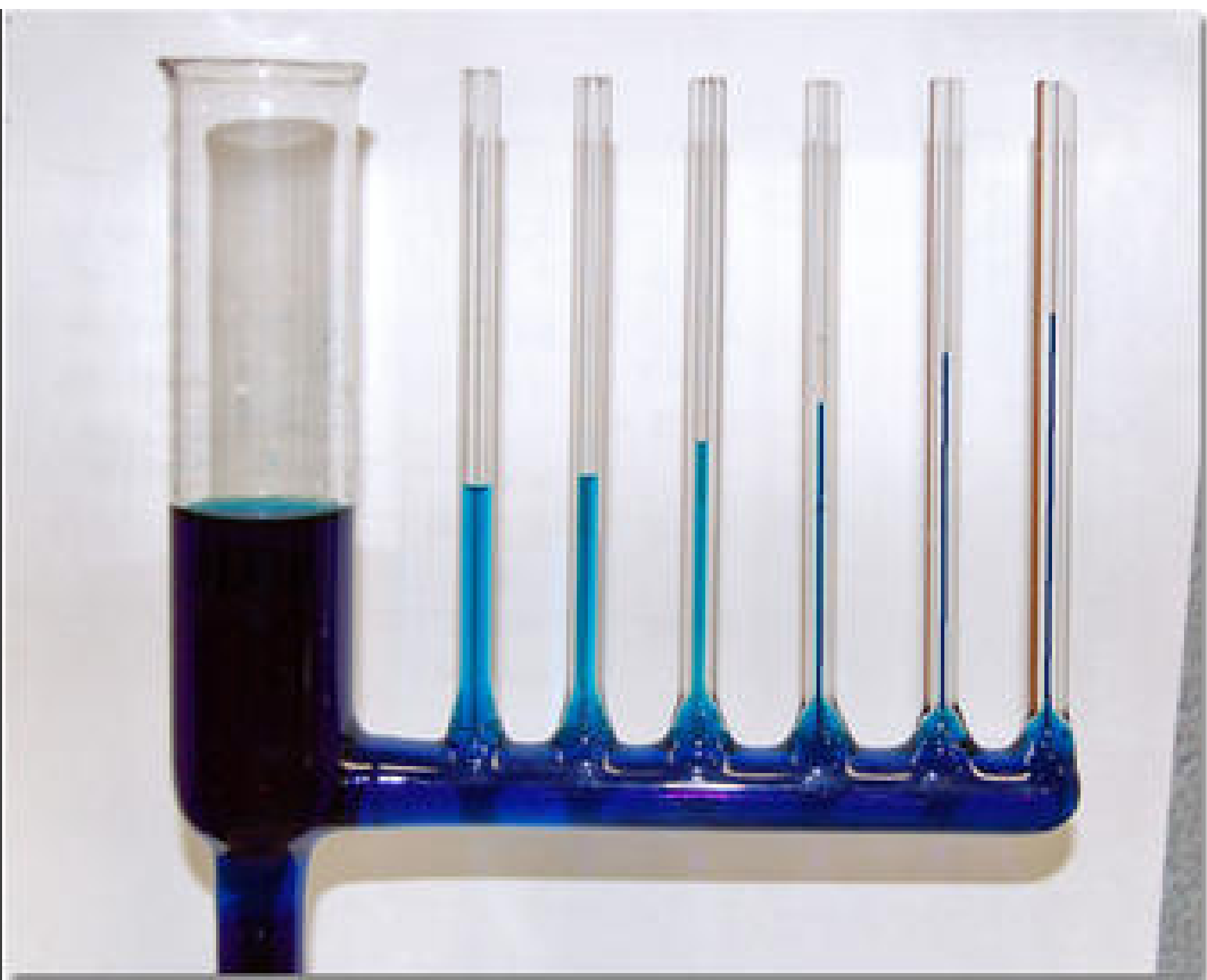
**INSTALL
CAP
BEAD
HERE**

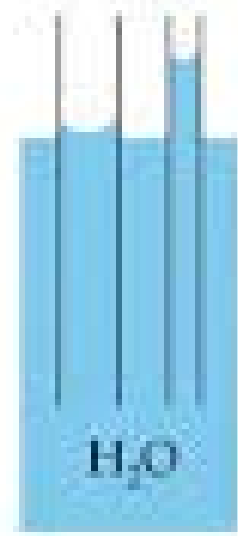


**DISCOLORATION
FROM GLAZING
LEAKS**

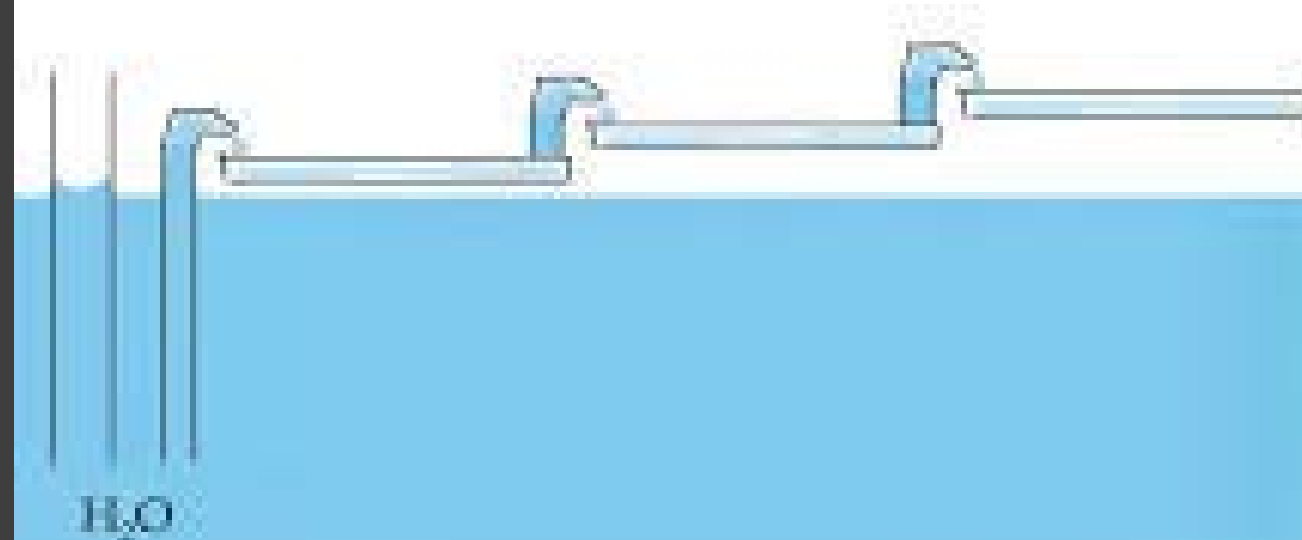








capillary action



COVER I

Khiva, Uzbekistan

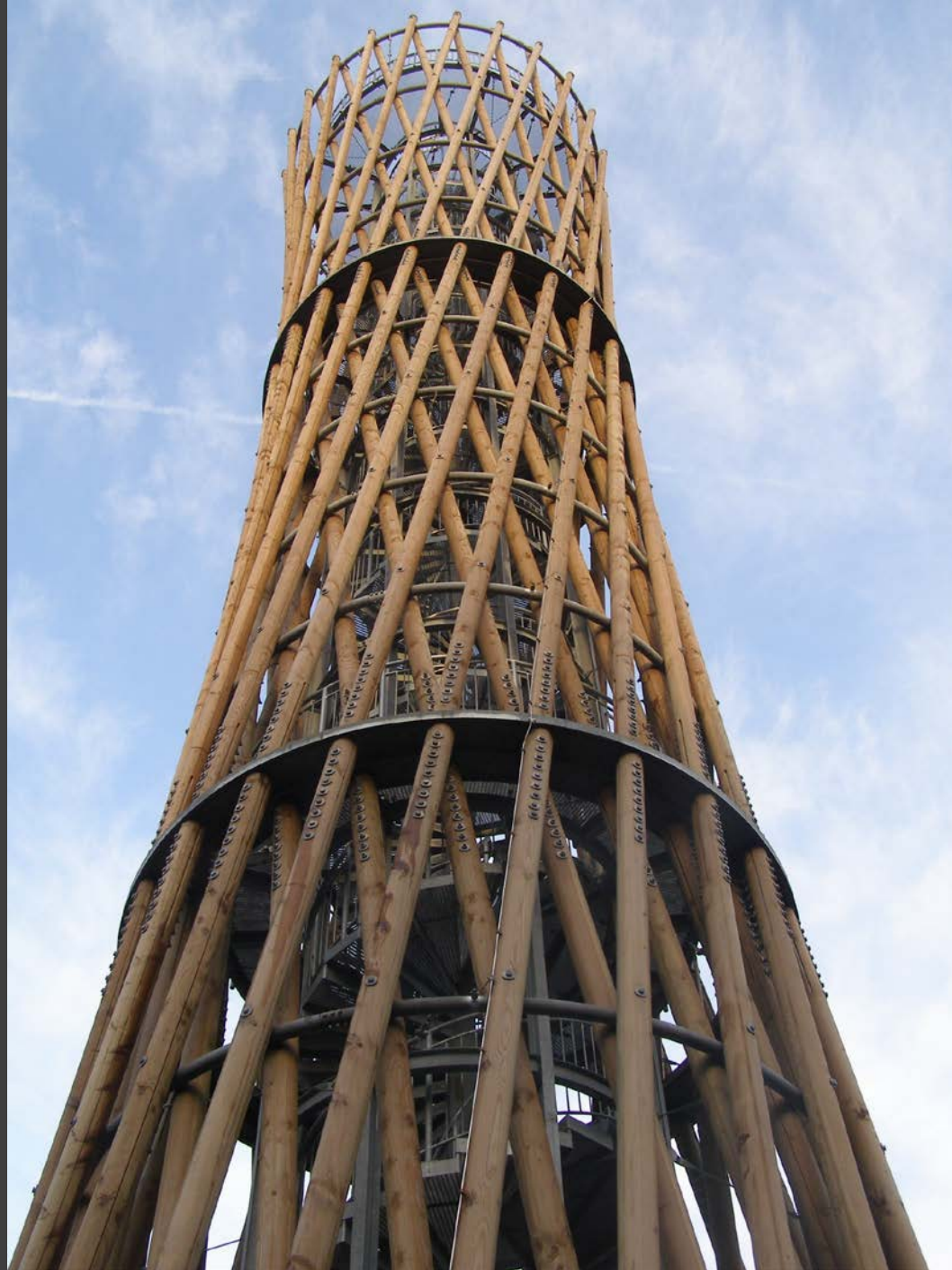
THE
NEW YORK
TIMES
STYLE
MAGAZINE

Travel
May 17, 2020

On the enduring
romance and
eternal influence of
the Silk Road

THE
ROUTE
THAT
MADE
THE
WORLD





















































ÜRÜN

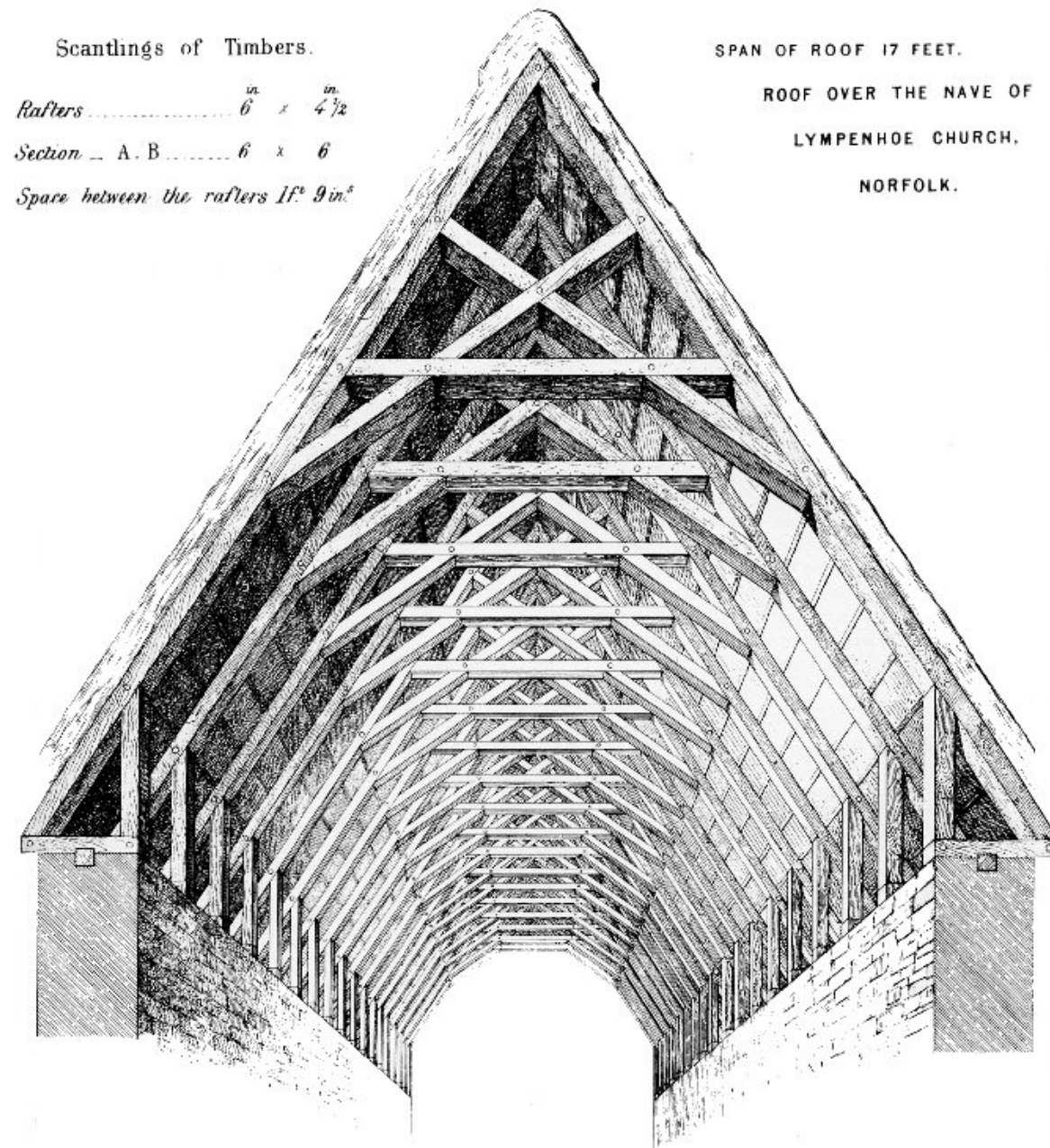


Figure 5.1 Lympenhoe Church, Norfolk. Drawing by Raphael and J. Arthur Brandon from *Open timber roofs of the Middle Ages*.

Common -- Truss configurations for the most widely designed roof shapes.



Scissors -- Provides a cathedral or vaulted ceiling. Most economical when the difference in slope between the top and bottom chords is at least $\frac{3}{12}$ or the bottom chord pitch is no more than half the top chord pitch.



King Post -- Span Up to 16'



Queen Post (Fan) -- Spans 10' to 22'



Fink (W) -- Spans 16' to 33'



Howe (K) -- Spans 24' to 36'



Fan (Double Fan) -- Spans 30' to 36'



Modified Queen (Multi-Panel) -- Spans 32' to 44'



Double Fink (WW) -- Spans 40' to 60'



Double Howe (KK) -- Spans 40' to 60'



Modified Fan (Triple Fan) -- Spans 44' to 60'



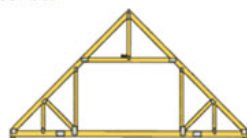
Triple Fink (WWW) -- Spans 54' to 80'



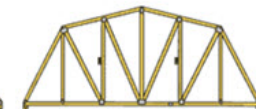
Triple Howe (KKK) -- Spans 54' to 80'



Polynesian
(Duo-Pitch)

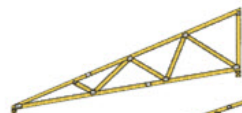
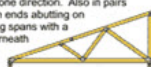


Room-In-A-Roof



Gambrel

Mono -- Used where the roof is required to slope only in one direction. Also in pairs with their high ends abutting on extremely long spans with a support underneath the high end.



Scissors Mono



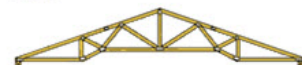
Mono



Studio



Studio



Tray



Stepdown Hip



Hip Girder



Double Cantilever



Tri-Bearing



Double (DUBL)
(Double Pitch)



Modified Queen
Scissors



Howe Scissors



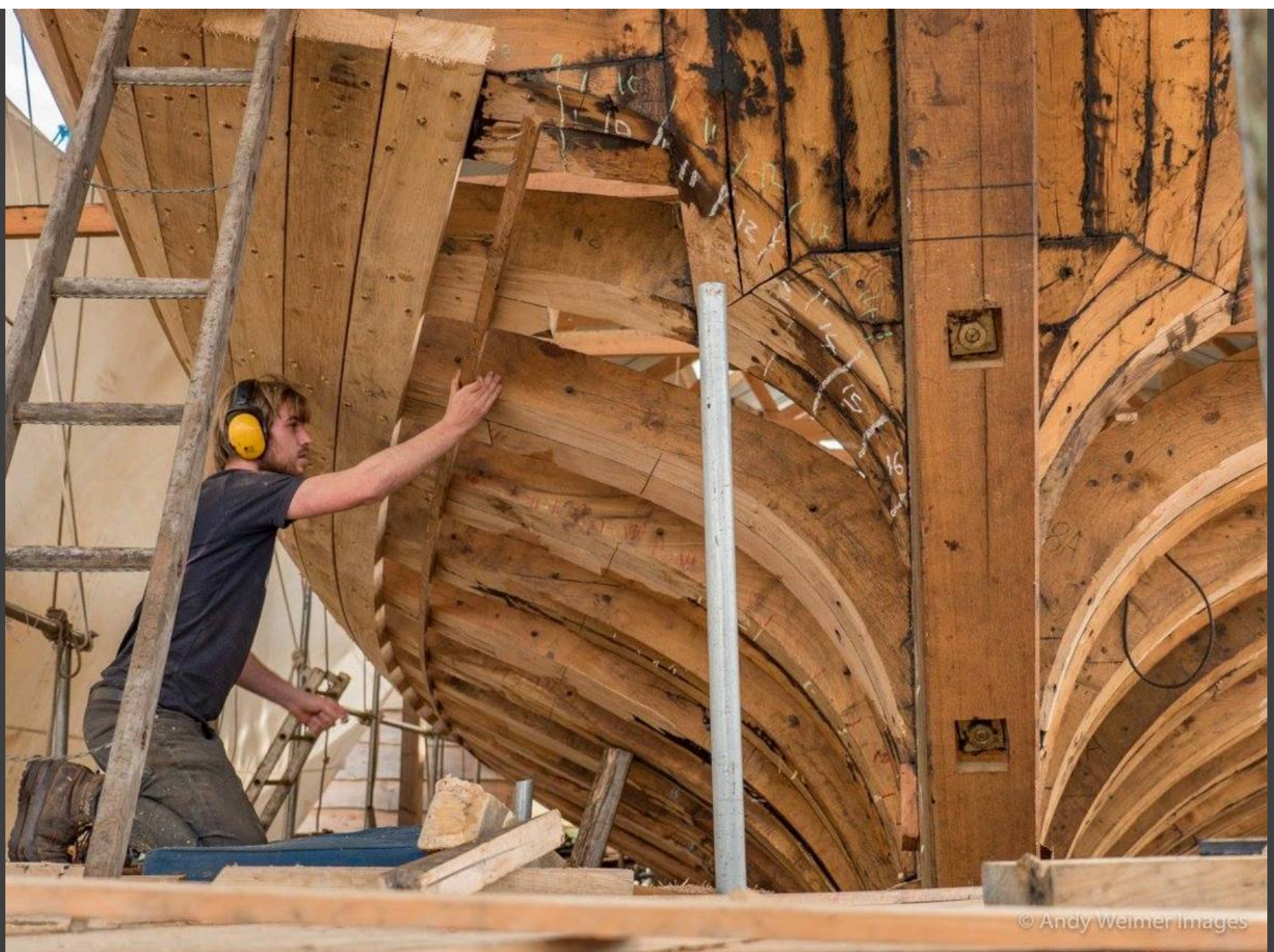














fineart
america





T. C.
BAYINDIRLIK BAKANLIĞI
NEŞRİYATI
Seri : 6
Sayı : 29

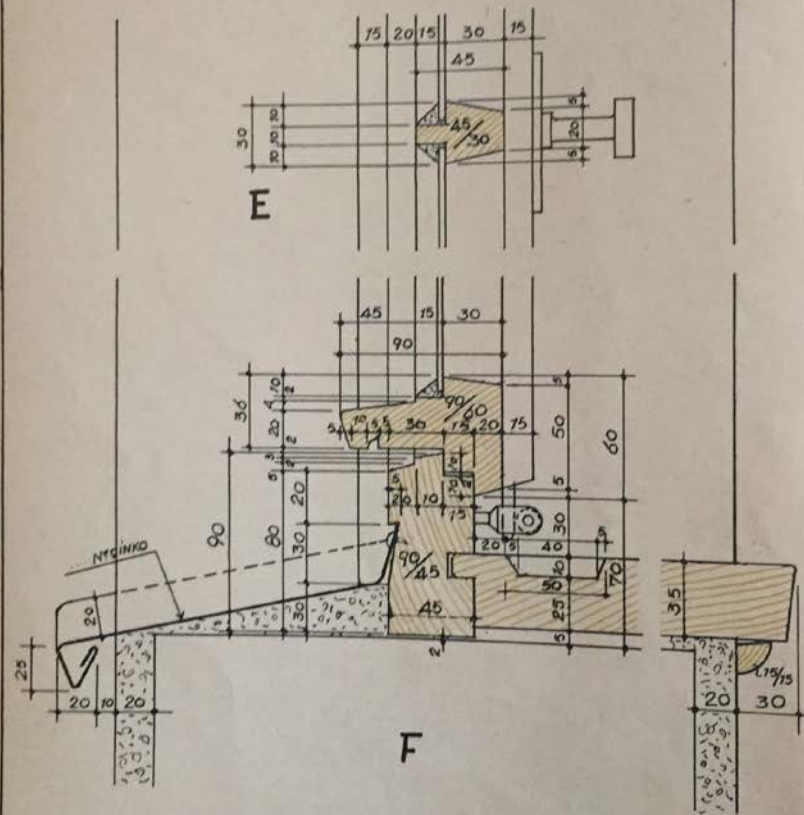
AHŞAP PENCERELER

KİTAPÇILIK VE MATBAACILIK T. A. Ş.
BAHİR-İ CALİEDDİN KİRALI
İSTANBUL

1949

Tek Pencere

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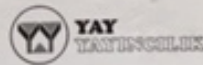
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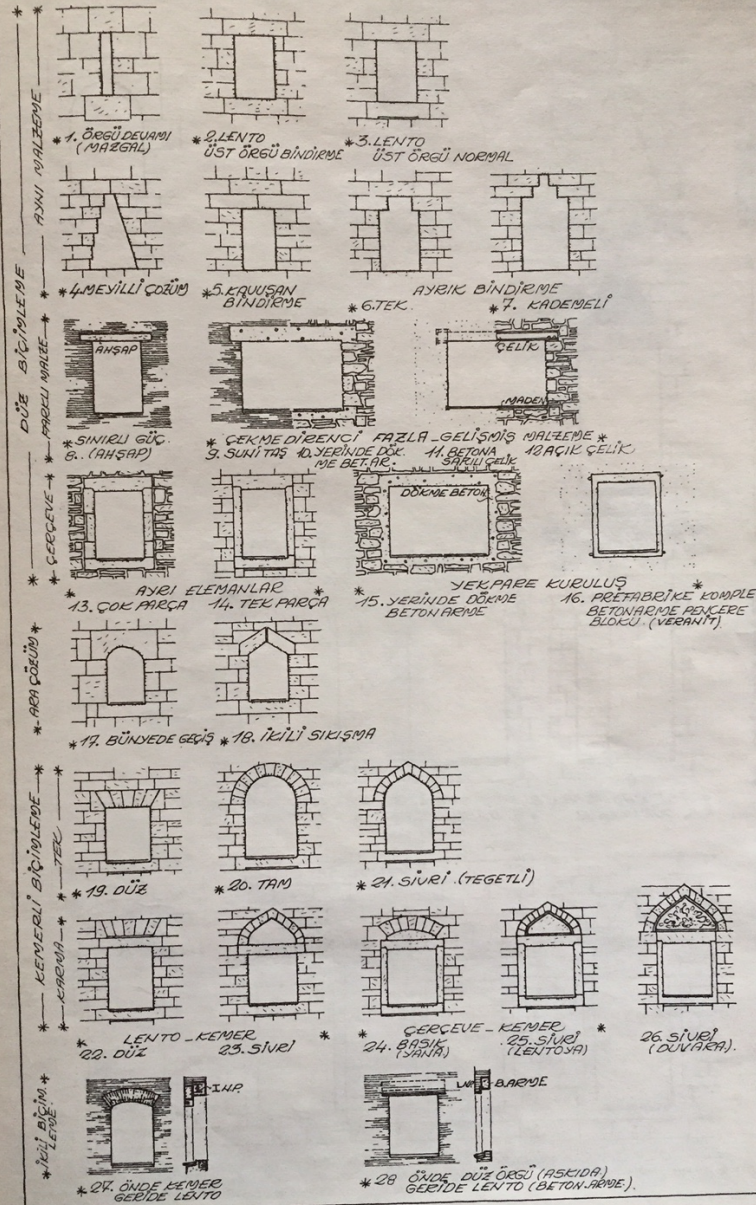
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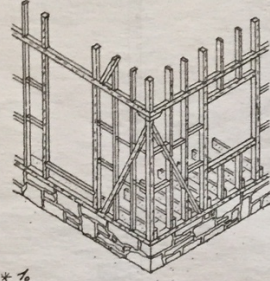
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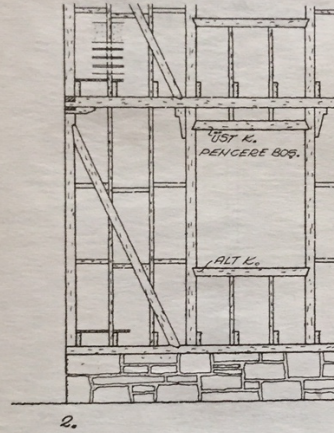
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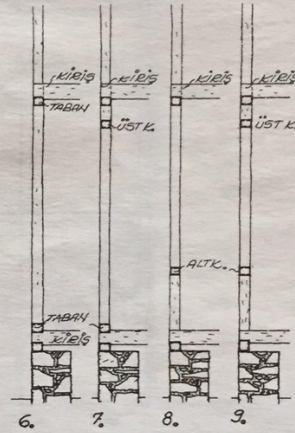




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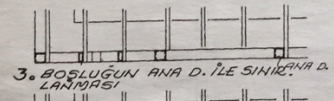


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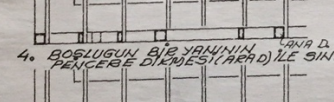
7.

8.

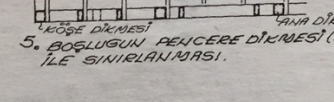
9.



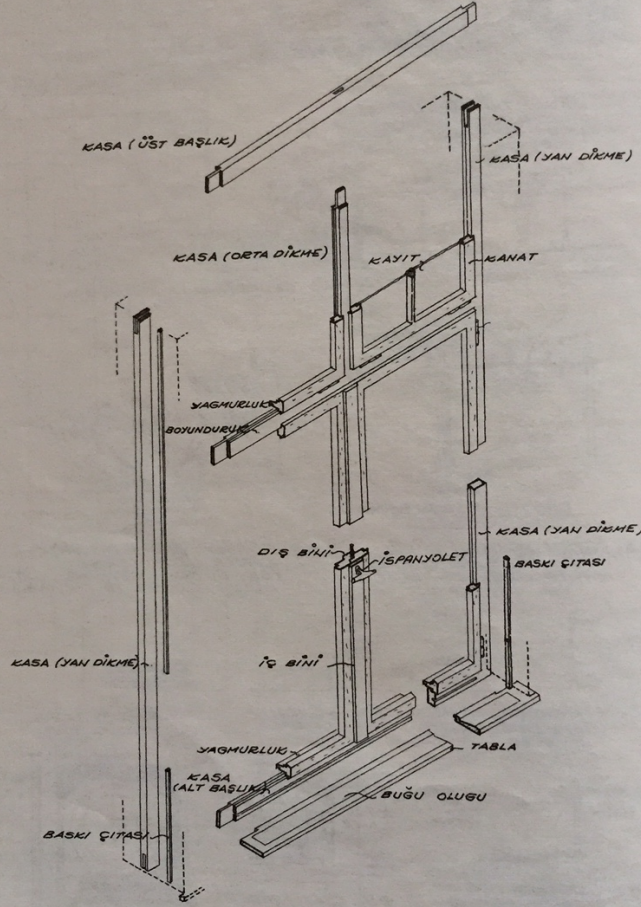
3. BOŞLUĞUN ANA D. İLE SINIRLANMASI



4. BOŞLUĞUN BİÇ YAKINININ PENCERE DİKME (AR.D) İLE SINIRLANMASI



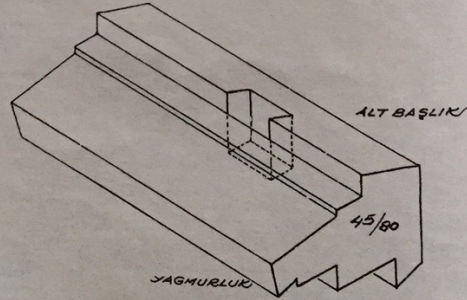
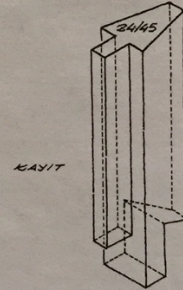
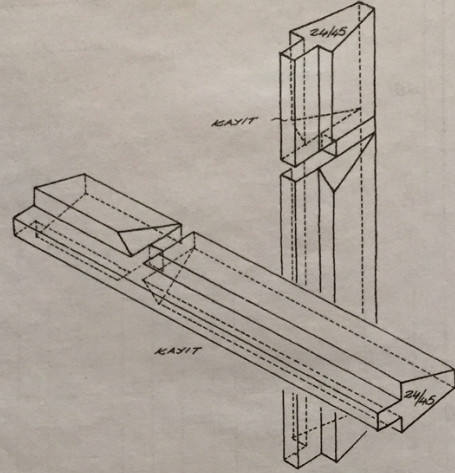
5. BOŞLUĞUN PENCERE DİKME (AR.D) İLE SINIRLANMASI



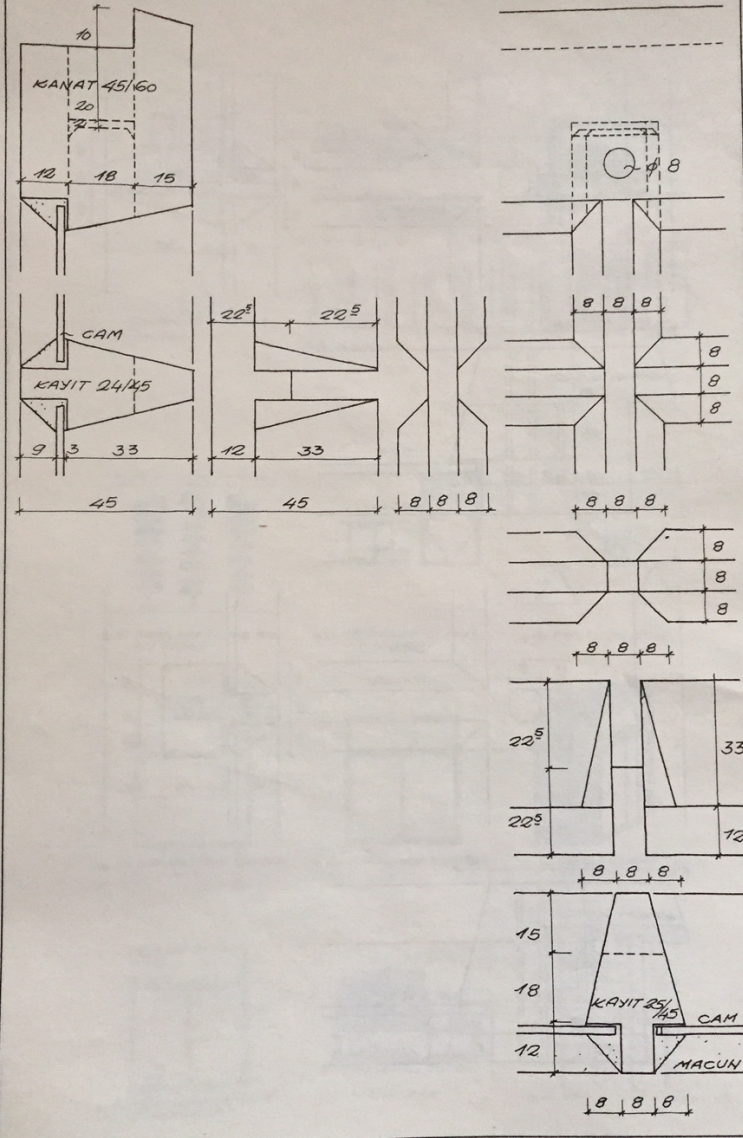
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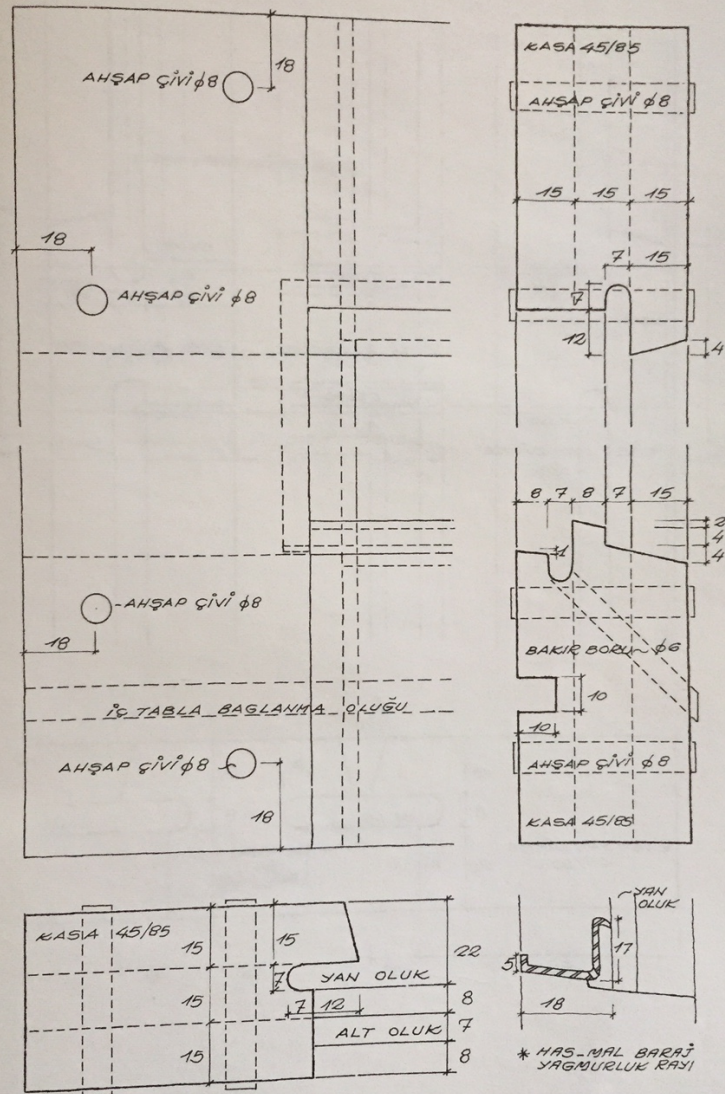
* AHSAP R - KAYITLAR *

D. 114



YAGMURLUK





COURS
DE
MATHÉMATIQUES

A L'USAGE DE
L'INGÉNIEUR CIVIL,
PAR J. ADHÉMAR.

APPLICATIONS
DE GÉOMÉTRIE DESCRIPTIVE.

CHARPENTE.

DEUXIÈME ÉDITION, REVUE ET AUGMENTÉE.

PARIS.

CARILIAN-GOËURY ET V^{os} DALMONT, Libraires, quai des Augustins, 49.

BACHELIER, Libraire, quai des Augustins, 55.

MATHIAS, Libraire, quai Malaquais, 45.

L. HACHETTE ET C^{ie}, Libraires, rue Pierre-Sarrazin, 14.

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