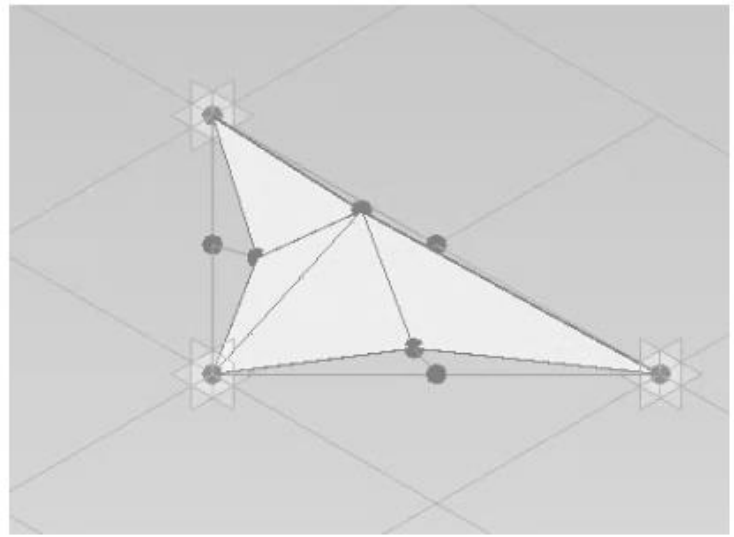

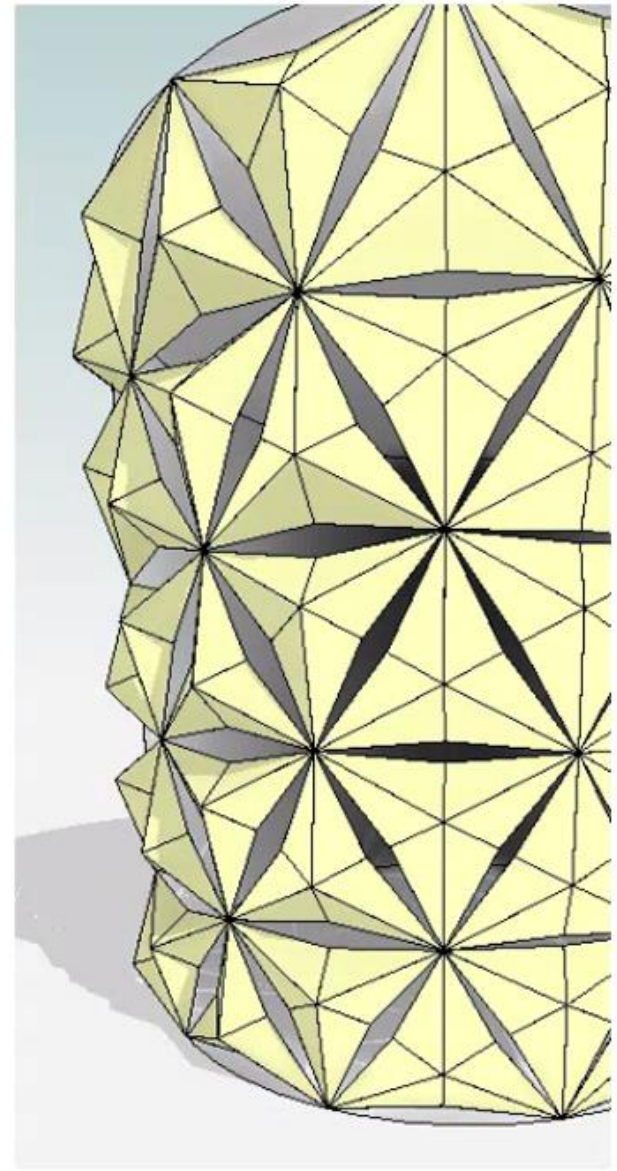

Solar Responsive Facades

3 part tutorial series

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Previously on Part 1
Dynamo and Images

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Managing Image Files

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Previously on Part 2
Adaptive Components

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Case Study
Ernst Giselbrecht, Kiefer Technic Showroom

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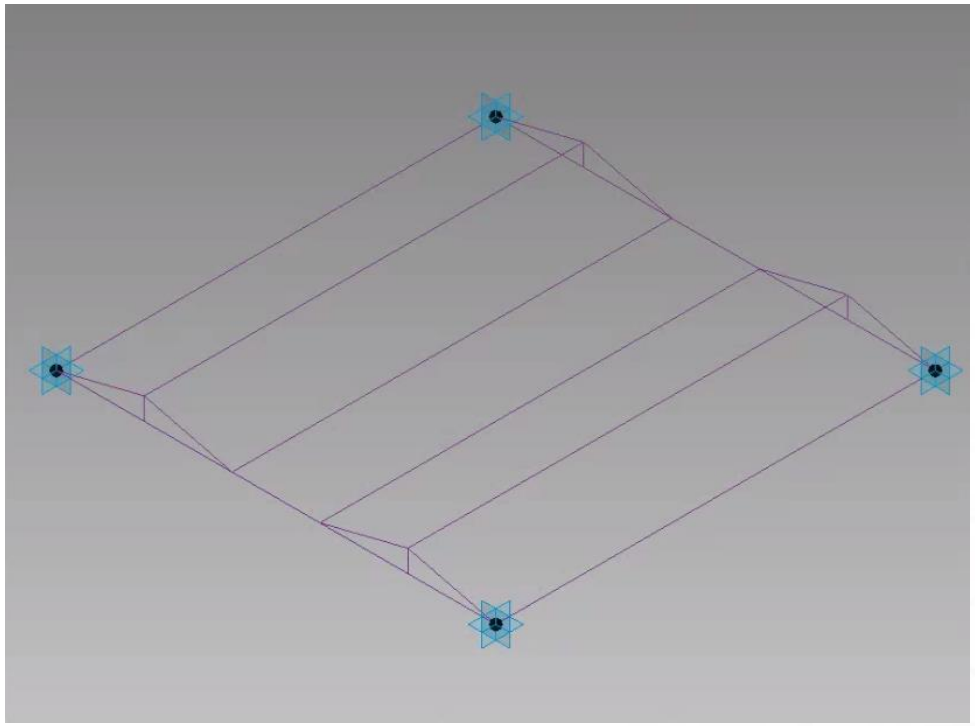
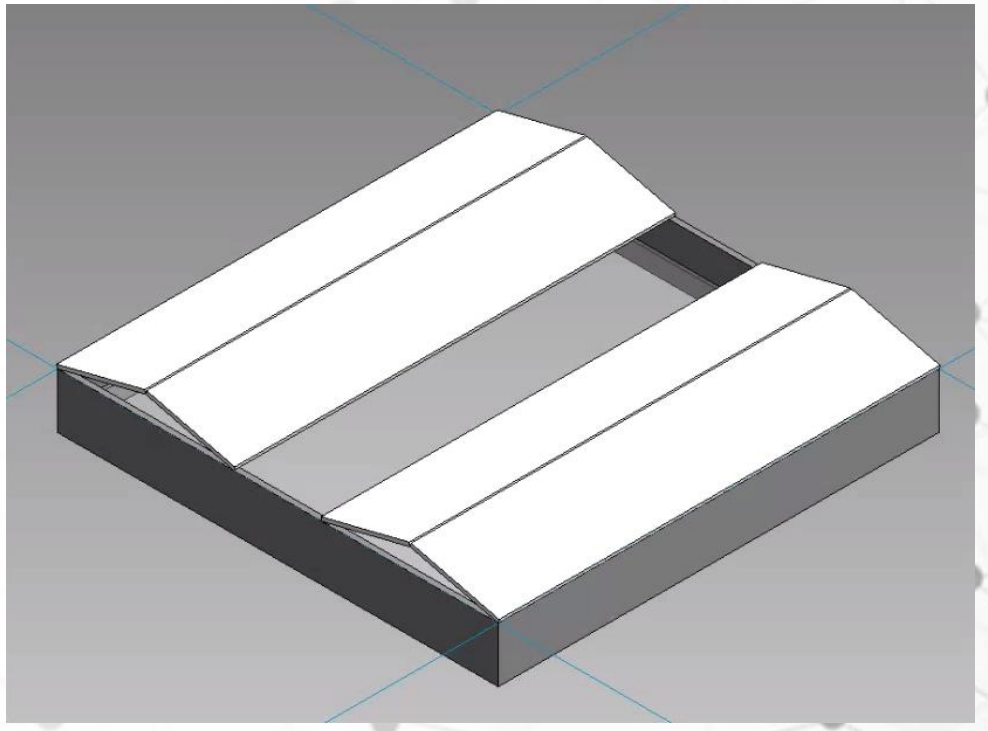
Adaptive Components





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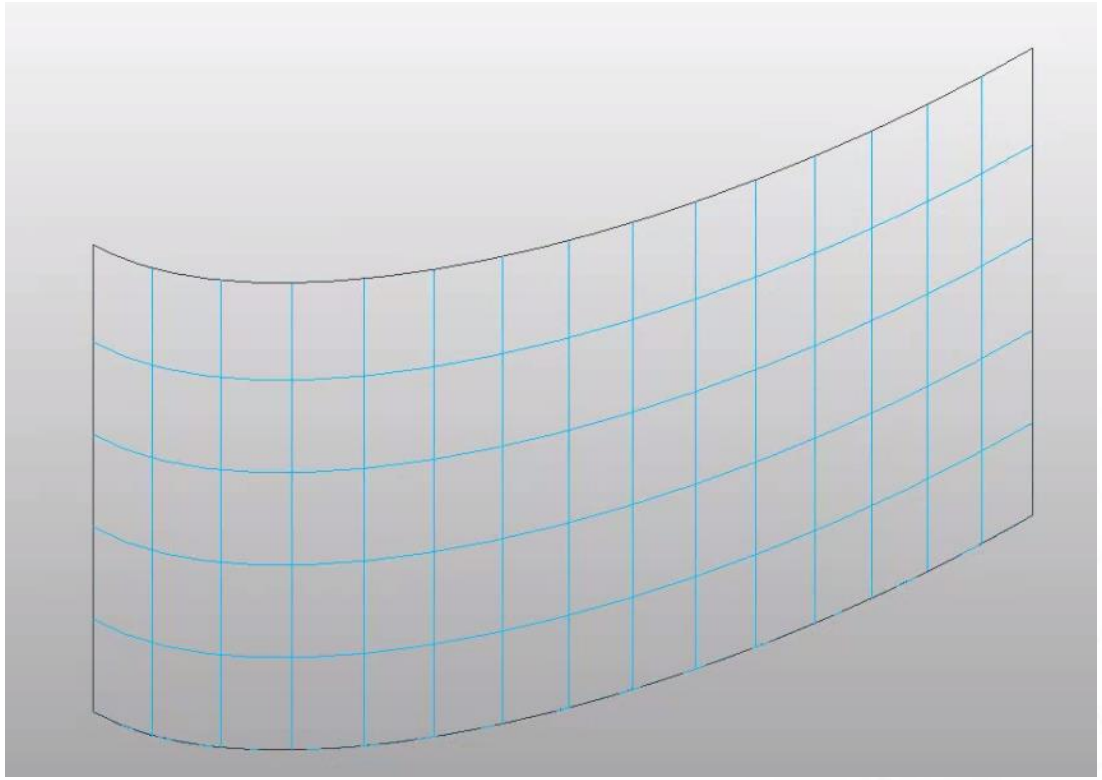
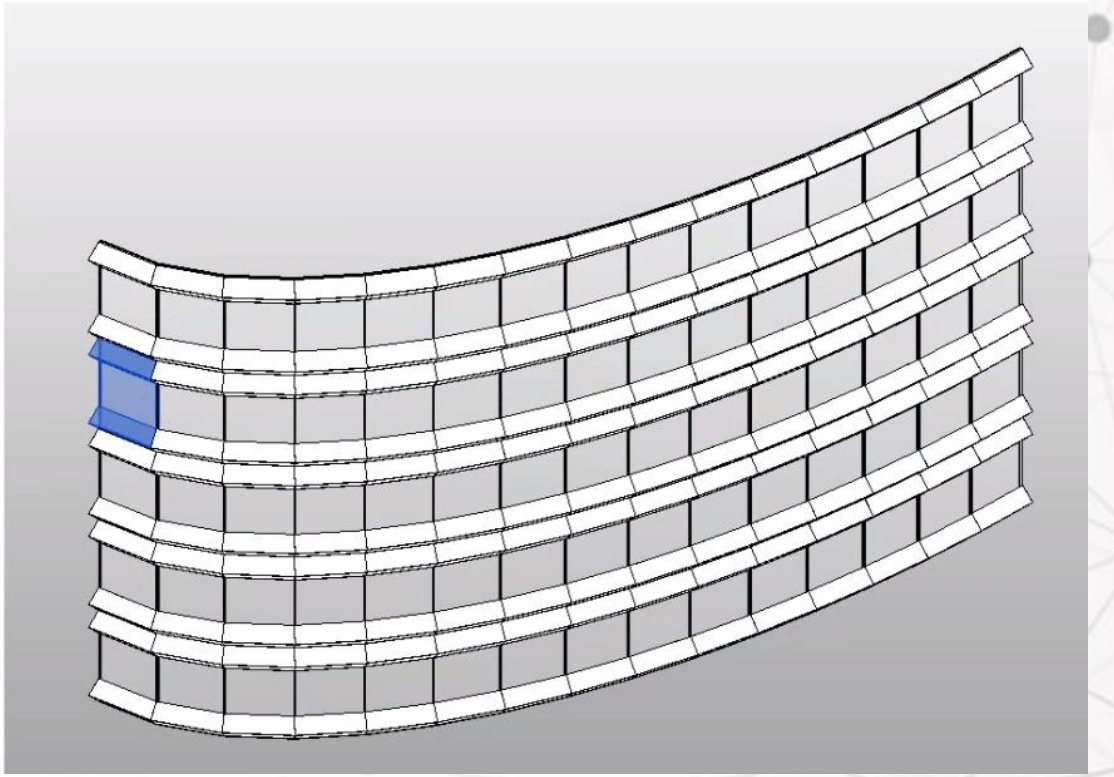
Conceptual Massing





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Part 3
Solar Responsive Facades

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Making the facade move!

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Alternative Panel Creation Lunchbox

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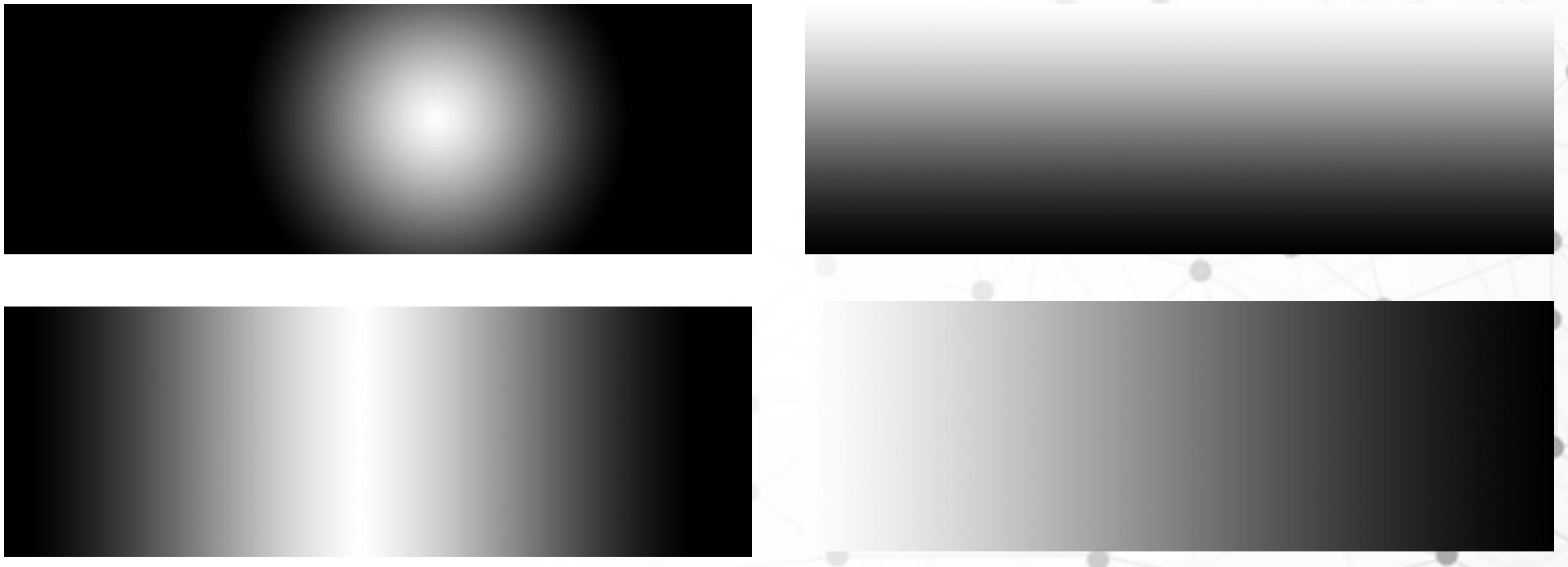
Method 1 – Image Brightness



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Alternative – Image HSB

Red is at hot end of spectrum
Green is reduced

Red is introduced

Green is mid end of spectrum

Green is introduced

Blue at cool end of spectrum

Example - Temperature formula
5 Red + 3 Green + 1 Blue
Divide by 8 = Temperature percentage

Factors can be adjusted to suit

This way as the colour gets ‘hotter’ the formula will pick this up by scaling each colour by temperature intensity

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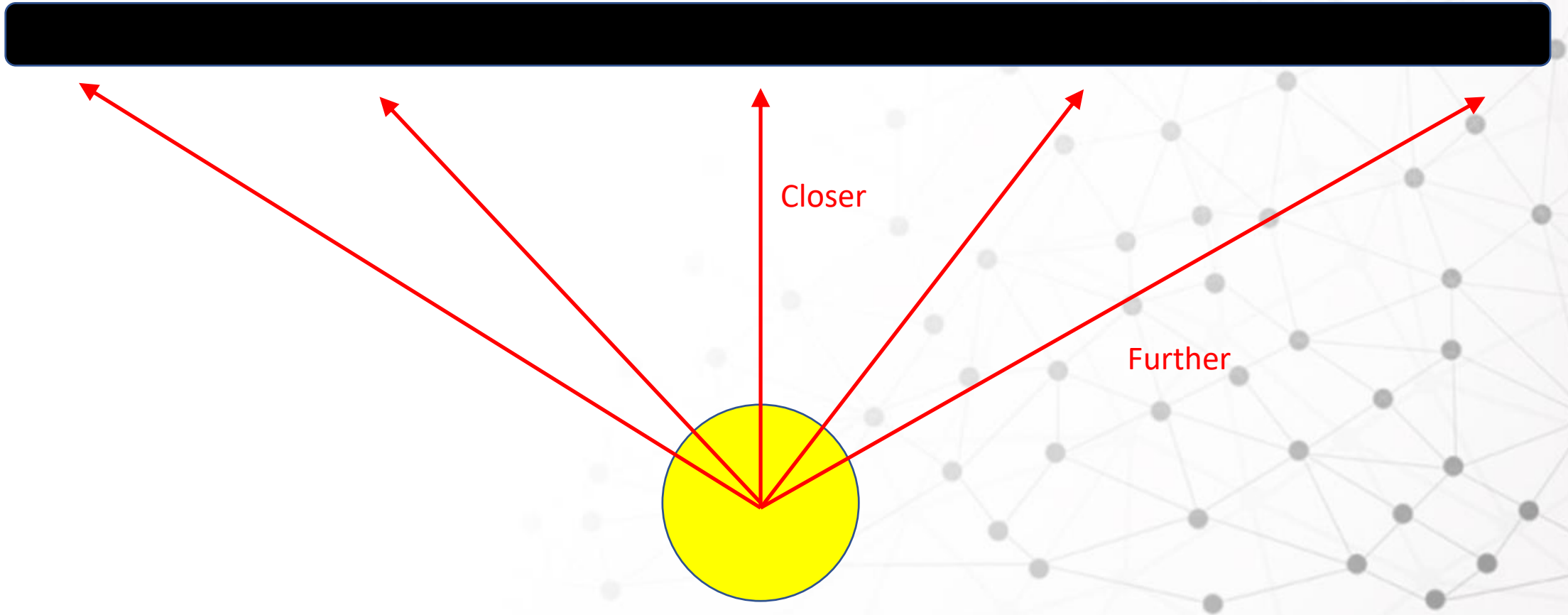
Method 2 – By Distance



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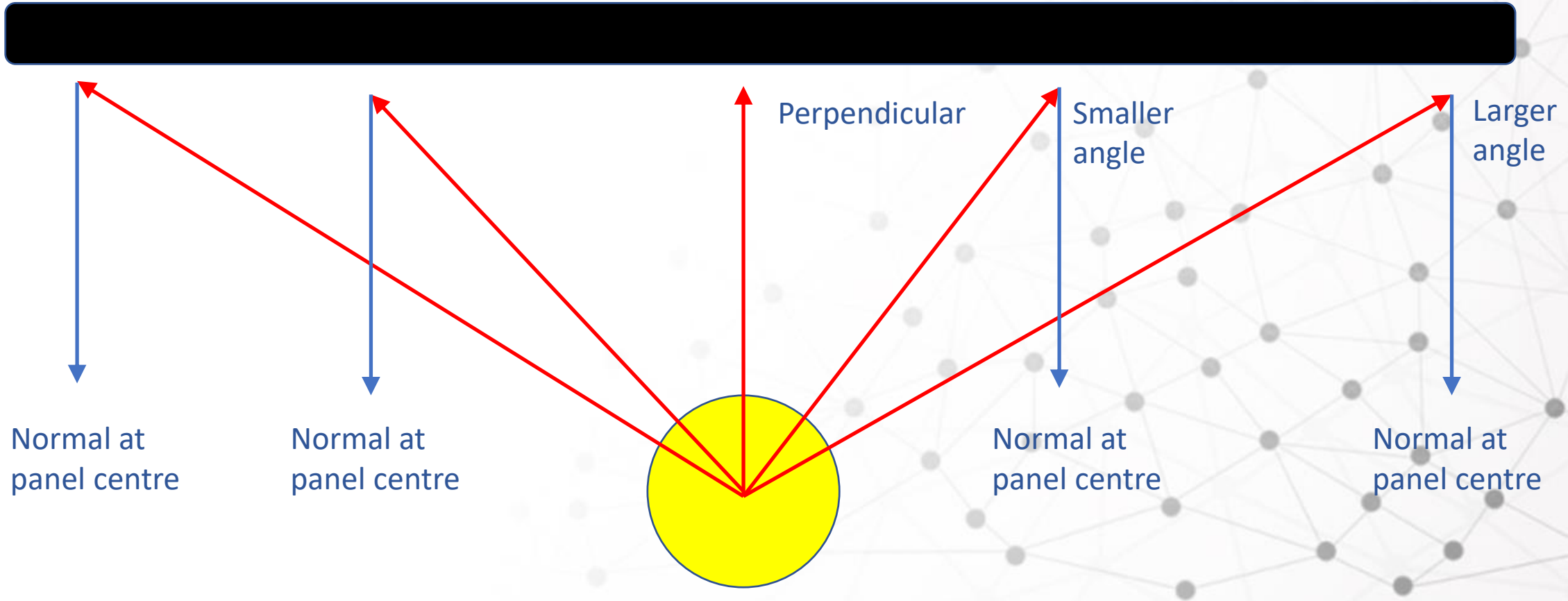
Method 3 – By Incident Angle



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Use your creativity!

Shading hood depth optimization

Lateral panel angles for light intrusion

Element protrusion and murals

Aperture adjustments for light entry