

Type: Urban texture

Category: Urban structure

Measures addressing the urban surfaces related to their material



Description

Measures addressing the urban surfaces e.g. ground, walls, roofs, concerning the material.

Measures comprise choosing material which decreases the thermal load (e.g. less concrete/ asphalt – more vegetation for roofs) and/ or which increase the reflection of sun light (e.g. choosing lighter colours).

Spatial scale

Building level; Business/industrial park;
City quarter/street; City

Problems addressed

- Heat wave: reduces the heating up of areas, cooling effect during nights
- Heavy precipitation: If more vegetation is used run-off can be reduced

Combination with other types of measures

- Green roofs, green walls, green open spaces
- Open water – flowing, open water - standing
- Urban setting

Implementation – functionality issues

- Ability to be resilient to extreme temperatures
- Material must be adapted for respective use
- Surfaces with standing water cool during hot days but may contribute to higher temperatures during summer nights.

Further benefits

- If more green spaces are used: Lower fine dust load, may have positive effects on biodiversity, recreational use, attractiveness for living and working.
- Depending on concrete measures: e.g. combination with re-development of urban areas.

Economic issues

Choosing lighter colours is very cost-effective and can be implemented within short-term, especially if compared to measures regarding the urban setting (more long-term).

Acceptance

Social acceptance depends on concrete measure.

Possible obstacles

- Conflicts may arise with urban design aims, e.g. regarding regionally typical appearance of buildings or regarding monument conservation

Find examples in Structural Fact Sheets



Green roof
De Tweeling
Nijmegen, NL



Green and brown roofs
Hastings, UK



Green roofs
Town Hall
Nijmegen, NL



Green roofs
Latenstein
Tiel, NL



Green wall
Inner city
Nijmegen, NL



Green public courtyards
Nijmegen, NL



Cool Nature Park
Tiel, NL



Adapted infrastructure
Rouen, FR



Ambition note
Wvi, Ieper, BE



Urban planning
Wvi, Ieper, BE