### CLIMATE CHANGE ADAPTATION

WORKS TO TRADITIONAL BUILDINGS

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### SCOPE

- The need why is change needed
- Key areas of building fabric
- Classical and traditional detailing
- And what can be done (including LBC)
- Area and landscape considerations
- HES 'Climate Change Adaptation for Traditional Buildings'



### THE NEED

#### AN ALIGNMENT OF CIRCUMSTANCES

- Increased rainfall
- History of poor maintenance or simply backlog
- Difficulties with access and working at height
- Incorrect materials
- Poor appreciation of detailing
- Changed policies and activities by others
- Second order effects timber decay



## KEY BUILDING FABRIC AREAS

#### WHAT TO CHECK

- Chimney cans and copes
- Skew copes and tabling
- Skews and flashings
- Parapets
- Renders and finishes
- Rainwater goods
- Below ground drainage

































## TRADITIONAL & CLASSICAL DETAILS

#### THEY HAD THOUGHT OF THIS STUFF..

- Scotland has had experience of wet
- And knew what to do; we have forgotten this
- So, cuts and channels
- Stooling
- Drips and string courses















# UPGRADES

#### SO WHAT TO DO...

- LBC considerations change is implicit in the LBC process
- Careful and proportionate details
- Compatible in scale and craft to existing work
- Enhancement of performance
- But using an established palette of materials and techniques
- So 'solutions in a tin' are not our thing
- But we must not make climate change an excuse for buildings not working























### WIDE AREA MATTERS

#### LANDSCAPE AND ADJACENT GROUND

- Many buildings will suffer from 'water from elsewhere'
- Hill drainage and field drains
- Road culverts and run off
- Softening and settlement
- Interventions beyond the building tarmac areas
- Capacity and routes of below ground drainage
- Water table issues







- Published October 2016
- In conjunction with Adaptation Scotland
- Indicative drawings and images
- Accepts that change will be required
- <u>www.engineshed.org/publications</u>



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