What is it and why is it important?

The principles that will be discussed apply as much to unlisted, simpler or more rural places of worship as they to more significant churches and cathedrals.
Some other questions...

- Why do buildings decay?
- What should you look for?
What is maintenance?

Maintenance is the routine work needed to keep the fabric of a building in good condition.

**Looking:** Inspecting the building to assess its condition, noting any problems or areas of concern and seeking advice to determine whether it might be necessary to carry out repairs.

**Doing:** Carrying out specific tasks such as cleaning drains and clearing debris from gutters and rainwater pipes.
Why do we need to think about maintenance?

Connection between Maintenance and Mission
Why is it important?

“Good conservation of heritage assets is founded on appropriate routine management and maintenance. Such an approach will minimise the need for larger repairs or other interventions and will usually represent the most economical way of sustaining an asset.”

PPS5 Planning for the Historic Environment: Practice Guide
Why do buildings decay?

Poor construction and/or poor quality materials
Why do buildings decay?

Inappropriate repairs or wrong choice of materials
Why do buildings decay?

Plants and animals...
Why do buildings decay?

Weather and the environment
Why do buildings decay?

Neglect
What should we look for?

Rainwater Goods - Gutters & Valleys
What should we look for?

Rainwater Goods - Gutters & Valleys
Gutters and Valleys
Downpipes and Gulleys
Roofs and flashings
Roofs and flashings
Lead and Sheet Metal
How often to check? - best practice 11mnths / Ecc Ins 2 to 5 years
Walls and the breathing building
Walls: mortars

80% evaporation through the joint zone

Moisture concentration = accelerated decay through freeze thaw & salt activity.

Ability to accommodate movement (autogenous properties)
Getting it Wrong:
the unthinking use of incompatible construction technology & materials
**THE LIME CYCLE**

Non-hydraulic limes harden only by drying and carbonation. Hydraulic limes also have a chemical set.

Limestone, Chalk, Etc

Limestone is burned to make quicklime.

Calcium Carbonate

Quicklime is slaked with water to make putty or dry hydrate.

Calcium Oxide

Dry Hydrate or Lime Putty

Lime (calcium hydroxide) and aggregate are combined to make mortar.
Walls and the breathing building
Rising Damp?
Entrapped Moisture and timber decay:

Beetle Attack:
Below 15% moisture content difficult for insects
Doors and Windows and
Draught Proofing
Condensation
Mould growth
(the bathroom effect)
dehumidification:
vent externally
Summary

Good maintenance is about spotting problems before they become too serious and taking early action to rectify them.

You can carry out practical tasks such as cleaning gutters and unblocking air bricks to keep the building safe and dry.

Take advice from your architect or surveyor if there are any matters of concern.

But remember that…

You may need to apply for permission to carry out repairs – check what rules apply to you before you start work.

The fabric of the building is important in archaeological terms – sometimes quite minor and seemingly harmless work can destroy archaeological evidence.
James Innerdale

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