

## Box specification

All new types of packing must be approved by The National Archives before they are used.

### Construction

- Boxes must consist of both a case and a lid. Case and lid must be cut from one piece of board or formed from the same piece of board, e.g. clamshell box. The depth of the lid must be the same as the depth of the case of the box.
- The most important criteria of a box sent to The National Archives is strength. All boxes must withstand a standard industry edge-crush-test (ECT) at a minimum of 5 kN/m.

### Context of use


- It is important to know what types of material will be stored in the boxes, if the records are large or heavy, or of high archival value. Different grades and types of box board might be required depending on the context of use.

### Grades of box board

Board Grade	Board Specification	When to use it
Grade 1 Permanent	<ul style="list-style-type: none"><li>✓ 100% chemical pulp</li><li>✓ pH 7.5 – 10</li><li>✓ kappa number should not exceed 5, or else less than 1% lignin content</li><li>✓ alkaline reserve between 2%-10%</li><li>✓ neutral internal sizing (EVA or AKD)</li><li>✓ no optical brighteners</li><li>✓ no plasticisers</li><li>✓ no metal particles, waxes, residual bleach, or other components that could lead to degradation when in immediate contact with the board</li></ul>	<p>Required for boxing materials of high archival or intrinsic value</p> <p>Also recommended, but not required, for boxing standard archival records</p>

Grade 3 Photo	<ul style="list-style-type: none"> <li>✓ 100% chemical pulp</li> <li>✓ pH 6.5 – 7.5</li> <li>✓ kappa number should not exceed 5, or else less than 1% lignin content</li> <li>✓ may contain fillers as long as pH is as specified</li> <li>✓ less than 0.0008% reducible sulphur</li> <li>✓ neutral pH EVA polymer adhesive where laminated</li> <li>✓ no optical brighteners</li> <li>✓ no plasticisers</li> <li>✓ no metal particles, waxes, residual bleach, or other components that could lead to degradation when in immediate contact with the board</li> <li>✓ pass the Photographic Activity Test (PAT)</li> </ul>	Recommended for boxing photographs, negatives and other photographic material
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### Types of box board

Type of board	Cross section of board	Benefits of use	When to use it
Corrugated board		<ul style="list-style-type: none"> <li>* rigid in larger sizes</li> <li>* good for stacking</li> </ul>	<p>If boxes are to be stacked in storage</p> <p>If records are larger and/or heavier than normal</p>