

6 Quick Checklists You Must Know about Thermal Paper Quality

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Selecting the right thermal roll paper for your printing application is very important. Direct thermal material is engineered much differently than the standard paper used in dot matrix printers. It contains chemicals that allow the paper to produce an image once heat is applied to it, and there are many paper and synthetic formulations to choose from. While they look similar, the chemical make-up of each material affects its resistance to moisture, heat, and other external factors. The thickness of the paper and the lifespan of images printed on it also varies. All of these attributes are very important to consider to ensure documents remain intact and readable during their useful life. Most documents look fine when they come out of the printer, but the true test is how they will hold up over their expected life span. When printed data is unreadable, problems with returns, service, warranties and compliance can arise.

The following are 6 key considerations you should examine before choosing a paper:

Heat

If exposure to extreme heat is a concern, choose a material that is heat resistant. Documents left in vehicles, for example, where temperatures can climb to higher than 150 degree in the summer can turn black and unreadable due to the chemicals in the paper reacting. To avoid this problem, some thermal materials are specially formulated to withstand higher temperatures.

Topcoating

All thermal papers have a basecoat and a thermal coat but not all have a topcoat. A topcoat provides an extra layer of protection against specific environmental exposure. Non-top-coated materials are acceptable for applications requiring limited resistance properties.



Topcoated thermal paper has dark and neat image

Thickness (durability)

Thicker materials tend to be more durable and are perceived by customers as higher quality. However, the thicker the material, the less paper per roll, resulting in fewer documents that can be printed before the roll needs to be changed. Take an example, for [57 x 40mm thermal paper](#) size, if you are using different thickness paper, the length can vary from 10m to 18m.

Smooth

The good thermal roll paper should be smooth on both front and back. If you are buying not smooth paper, there will be dust when using it in the printing application, that will hurt the printer header.

Moisture

If your document will be subjected to moisture, either because it will be exposed to the elements or stored in a wet or humid area, a paper with additional moisture resistance or a synthetic material will protect the document from degrading and becoming unreadable.

Archivability (intended lifespan)

So above are 6 factors you must consider when you buy thermal roll paper. **Trust but verify** is a prudent piece of advice for you, especially when you buy online.