

## Problems Associated With Cable Dressing

When Network or optical cables are installed in a building or cabinet, the task of fitting cables into an organised bundle is called 'cable dressing'. This dressed bundle is called a 'loom'. A dressed loom of cables is typically a bundle of cables with the outermost cables - that is, the visible cables made to look neat and organised with cable lengths running parallel to one another.

Manually untangling the cables in the bundle and then manipulating the outermost cables to achieve straight parallel lines is the work of a skilled tradesman and is only generally undertaken by an experienced cabling engineer.

Even with the most experienced cabling engineer, the dressing task is laborious and time consuming with the end result being a neat loom of cables on the outside, but always a disorganised array in the middle of the loom.

The cablecomb makes the dressing of cable looms fast and precise. It also ensures that cable lengths throughout its cross-section are supported in parallel to one another. In its simplicity, the cablecomb is a tool with a number of holes punched into it, the ratio and hole configuration assists in the loom of cables being kept in order and in a pre-defined pattern, aiding the shape of the loom. To aid loading of the cablecomb, the holes are numbered in a specific sequence. This numbered hole configuration ensures that each cable appears in its correct position and orientation when the cablecomb is unloaded at the patch panel.

When manually dressing a loom of cables, it is impossible to maintain the position of all cables in the loom continuously along the looms entire length right up to the point of termination onto a patch panel. It then becomes apparent that because the cables are not in any organised sequence, they appear randomly and most likely in the wrong order. This leaves the cabling engineer with the onerous task of making a tangled cable bundle look neat and organised. This problem further compounds the task of terminating the cables onto a patch panel where the cables should ideally be in a numerical sequence, sorted into odd and even numbers and more importantly, should appear from the loom in the right order and correct position.

Supporting a variety of patch panels and uses, the cablecomb is available in 16, 24, 32, 48 and 96 port versions. The cablecomb was designed to support category 3, 4, 5, 5E, 6 and 7 cabling. However, it can also support any cable type (media, telephony, audio and fibre cables).

The cablecomb is **NOT** to be used on any type of live electrical cables.

Since cables from a loom dressed by hand do not appear in an organised sequential manner, this makes the operation to terminate the cables a needlessly untidy and awkward task. In addition as the cables have to be individually manipulated to form a neat loom, problems can arise when tying the loom structure together, and without any means of keeping the cables in a particular order or position, the cables will naturally tend to mix-up and intertwine. The problem is further compounded when dressing cables from underneath a wiring cabinet, a wiring frame or from a floor or ceiling void. This is because it is not possible to maintain the alignment of the looms outermost cables such that they are prevented from crossing each other. Subsequently, the cable lengths will fail to run parallel with each other. This makes the loom of dressed cables look untidy and unprofessionally installed with cables crossing each other.

Cablecomb solves this problem by loading cables into correctly numbered holes. The individual cables are threaded through the holes and when all the cables have been threaded, the tool is pulled back up the lengths of cable towards the beginning of the loom. The cablecomb holds the cables in the most suitable spacing to one another, where upon a plastic cable tie can be fitted to maintain the looms shape. The cablecomb is moved along the looms length in stages with additional plastic ties being fitted to maintain the looms shape. The cables are then removed from the cablecomb in the correct order and orientation, ready to be terminated.

The cablecomb also helps in forming a completed loom around any awkward shapes and angles that may be present in an installation. For example, in a wiring cabinet, the length of loom that may be required might be from under the floor or from a ceiling void, along a cable tray and up to a patch panel. The cabling engineer simply pulls the required length of cable through the cablecomb before using the tool to

dress the cables. The cablecomb also helps maintain the correct bend radius of the cables as specified by the cable manufacturer.

The aim of the cabling engineer is to achieve a dressed loom of cables where the individual cables do not cross each other, always running parallel so that the dressed loom of cables is free of any tangled cables. The individual cables can then be removed from the loom in their correct order and position and individually terminated. This manual method of dressing cables is very time consuming and demands great skill. The loom of cables at the patch panel can still remain somewhat untidy, depending on the individual skill of the engineer assigned to dressing the cables.

Cablecomb enables the work of the cabling engineer to be carried out efficiently, with consistent results being achieved even by engineers unskilled and unfamiliar with cable dressing. Amazingly high professional standards are achieved in a comparatively short time. By using the cablecomb, highly skilled engineers are no longer required for cable dressing, thus ensuring their skills can be focused on more important work and projects.

In the hands of a newly trained engineer, cablecomb enables work of a highly professional standard to become the norm for the industry, not the exception, efficiently and effectively.