

## Using CD-ROMs on a Construction Project

By Ron Winter

Copyright © October 31, 1997

CD-ROM. The term has been used for so long that writers in popular magazines no longer define the meaning of the acronym or explain the origins and uses of this disk and its accompanying player. I know because I have researched as far back as a Business Week article dated April 15, 1996. Even Business Week expects you to know what a CD-ROM is and how to use it! How come Owners of large construction projects and Construction Manager firms do not?

A CD-ROM is a shiny disk which a laser in a CD-ROM reader can 'read.' It uses the exact same format as the CDs use to store and play music. In fact, your average CD-ROM can play your CDs right out of the box! The difference is that CD-ROMs are encoded not with the on's and off's of some musical pattern but with the 1's and 0's of computer code. The exact same disk which can hold an album worth of music can also hold up to 650 MB of data (that's 465 'floppies' worth or 10,000 scanned-in pages.)

Here is the important part. You can now produce your own CD-ROMs for a lot less cost than printing the same data, and the CD-ROM is much more useful! It is now time for construction projects to start 'publishing' CR-ROMs to distribute the Specifications and even to include the Plans. The secret is a new 'spin' on CD-ROMs called a Recordable CD (or CD-R for short.)

CD-R machines create normal CD-ROMs from any data right on your machine. An internal unit can be purchased for less than \$300. Blank CD-R disks can be purchased for less than \$3 (and as low as \$1.) Due the math - for a large construction job, a standard Specification is at least 300 double-sided pages long. At 3¢ per copy, that's \$18 per copy (your mileage may vary.)

The industry is already set to use CD-ROMs. All new business computers and most personal ones now have a CD-ROM reader. New internal ones for desktop computers can be had for less than \$80. Even all, modern laptop computers come equipped with CD-ROM readers. If someone really needs the paper, they can print out as many copies as they like. But specifications are more useful when they are on disk.

They don't wear-out or get torn. You can use the word search feature to quickly find the passages that you are interested in. For example, claims guys (and the Scheduler) can just search for the word "day" to find most of the scheduling-related paragraphs. You can look for the word "submittal" to prepare a Schedule of Submittals. And when you find the proper section, you can cut and paste exact wording into your document instead of referencing the reader to the correct section.

CD-Rs are more dependable than paper. Most are certified to retain data for 10 years (with an estimated 'real' life of 30 years.) They can be stored in small spaces and will never give you a paper-cut.

While you are at it, with all of that extra space left over why not put the Plans on the CD-R as well? Include an inexpensive file viewer and you are set (don't forget to pay royalties.)

Because you can continue to keep adding data to the disk over and over again until it fills up, you can transfer the meeting minutes to disk. Store documents such as schedule narratives or even the schedules themselves. The possibilities are endless. Only one thing is for certain, you can't afford those paper manuals anymore.