



## All PVC Pipe is NOT the Same!

Know the facts.

Check the rating!

Read the print on the pipe.

CONDUIT SUNLIGHT RESISTANT MAX 90°C WIRE

All PVC Pipe that has the 90°C rating is required to have "90° C wire" or max "90° C wire" printed on it.

### Is the PVC conduit you are using rated for systems specified to 90°C?

Did you know that imported PVC conduit used in systems specified to 90°C without the required markings is non-compliant? Non-compliant pipe puts the entire system, contractor, and even distributor at risk.

### Know the specifications for your projects!

Modern wires and conductors are most commonly rated to 90° C. Specifying engineers and utilities normally stipulate that conduit meet the 90° C rating. All conduit with this rating has been tested and must be marked on the side of the pipe. PVC pipe with this rating undergoes stringent testing over a period of 360 days to ensure that it withstands exposure to a wide variety of environmental conditions without any negative impact to the physical properties of the PVC. All CANTEX PVC 90° C rated conduit has passed this extensive testing---And it's marked!

### Imported PVC conduit often DOES NOT MEET the 90° C rating requirement!

As of late, many importers are selling PVC conduit that does meet the 90° C rating requirements. The pipe being imported is NOT approved for 90° C specified systems. As inspectors become aware of the use of this non-compliant conduit for 90°C conductors, the entire system may be rejected. It may then need to be replaced with a product meeting the required specifications. This exposes contractors and distributors to liability for the reinstallation of the non-compliant product and/or other costs related to delays, damages and safety issues.



## Q & A's

### **All about 90° C Certification for PVC Electrical Conduit**

#### **Q: What is 90° C Certification for PVC conduit?**

A: 90° C Certification means that the PVC pipe may be used with wires and cables rated for 90°C. It is the insulating rating for the conductor. Most wires and conductors today are generally rated to 90°C.

#### **Q: Who requires the 90° C Certification for PVC conduit?**

A: Most specifying engineers and architects specify that PVC conduit meet the 90°C Certification standard to match the 90°C rating on conductors. Conduit installed in 90°C specified systems that does not have the 90° C Certification rating is non-compliant and is likely to be rejected by inspectors.

#### **Q: How do I know if the conduit I am purchasing has the 90° C Certification?**

A: All PVC Pipe that has the 90°C rating is required to have "90° C wire" or max "90° C wire" printed on it. Therefore, reading the pipe is the best way to determine whether or not the PVC conduit meets the 90° C rating. If the conduit is not printed with this marking, then it is non-compliant for this certification. However, all certifications for specific brands of electrical products can also be found on certifying organizations' websites.

#### **Q: How does PVC pipe get its 90° C Certification?**

A: The PVC pipe undergoes extensive testing that takes up to 360 days in industry recognized test labs at third-party certification agencies such as UL, ETL, CSA or NSF. These organizations provide the 90° C Certification to the PVC conduit manufacturer. For additional information on the testing and certification, it is outlined in UL 651-Section 6.15.

#### **Q: What can happen to contractors who install non-compliant conduit in electrical systems requiring the 90° C specifications?**

A: When or if an inspector becomes aware of the use of the non-compliant product, they would reject the entire system, and require replacement with the correct product. This could expose contractors and distributors to significant liability for replacement of already installed product and/or other costs related to delays and damages. It would also leave them responsible for safety issues that arise later from undetected products that did not meet required specifications.

#### **Q: What brands of PVC pipe are non-compliant for 90° C specified electrical systems?**

A: There are several importers of PVC conduit that are selling their product in the United States as 90° C rated PVC conduit. This conduit does not have the certification or the required marking on the pipe. Large domestic manufacturers like CANTEX sell compliant 90° C certified PVC conduit that is always marked "90° C wire" or max "90° C wire."