4: What are PVC plastic pipe and fittings?

PVC pipe is manufactured by extrusion in a variety of sizes and dimensions and generally sold in 10’ and 20’ lengths. PVC pipe is available in both solid wall and cellular core construction. PVC can be used under ground or above ground in buildings. PVC materials are resistant to many ordinary chemicals such as acids, bases, salts and oxidants.

5: Is PVC hard to install?

No. In fact most installers find PVC pipe and fittings to be easier to handle. Its lighter weight makes it easier to manage on the jobsite and requires a smaller crew. The traditional lead pot and torch are not required for installation, saving time and money and reducing workplace hazards. The bottom line for most installers is that PVC pipe and fittings saves energy over metal competitors.

“Because when you look at PVC and the positive uses it has in our society, chlorinated water in a PVC pipe is about the safest way you can deliver water to the public.”

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For more information on PVC Pipe & Fittings contact THE PLASTIC PIPE & FITTINGS ASSOCIATION 800 Roosevelt Road, Suite 312 Glen Ellyn, IL 60137 Phone: 630-858-6540 Fax: 630-790-3095

www.ppfahome.org
PVC (polyvinyl chloride) plastic pipe and fittings are the material of choice for drain/waste/vent and water service installations because they are long lasting, easy to install, deliver potable water safely and/or dispose of water or waste fluids without contaminating surrounding materials.

If you aren’t using PVC plastic pipe and fittings, it’s time you considered the advantages PVC offers to every application.

1: Does PVC piping offer advantages in Life cycle Assessments?

Contractors, building owners, and maintenance managers have long recognized PVC’s durability. PVC systems are not subject to the corrosive influences of aggressive water or chemicals inside or outside the piping. This durability is seen as an advantage in light of today’s focus on life cycle assessments.

This long, maintenance-free service life is now recognized by a recently released study of environmental life-cycle analyses (LCAs) of vinyl. The study conducted for the European Commission is based on a review of more than 200 LCAs with a focus on about 30 LCAs that met ISO standards and that compared products on an application basis.

The European Commission (EC) conducting this study found that vinyl can offer environmental benefits equal to or better than those of other materials in many applications. As a result the study challenges material deselection policies by pointing out that the performance of a product using a durable, lasting material can outweigh concerns about the production of the material.

The assumption is that life cycle analysis should be based on application rather than materials levels, since the life-cycle impacts of a material will vary according to the products in which the material is used. This is especially true with PVC pipe and fittings, since many PVC piping materials are still in use more than 50 years after their installation, out-lasting their metallic counterparts by many years.

2: Do PVC materials fit into the LEED rating system?

The LEED (Leadership in Energy and Environmental Design) rating system is one of the most popular rating systems for “green” building in use today. The U.S. Green Building Council’s (USGBC) PVC Task Group issued a draft report in late 2004 finding that the environmental and health impacts of vinyl used in building products are comparable to those of competing materials.

PVC plays a crucial role in delivering safe, potable water. Patrick Moore, founder of Greenpeace and Green Spirit, testified in 2003 Boston, Mass.: “But it’s also important to note that the addition of chlorine to public drinking water is the single largest advance in public health in the history of our civilization. So, it’s not an either-or question. Because when you look at PVC and the positive uses it has in our society, chlorinated water in a PVC pipe is about the safest way you can deliver water to the public.”

The USGBC Task Group studied vinyl and some of the competing principal building materials for almost two years before recommending against a credit for excluding vinyl in the LEED rating system. The Task Group found that “the available evidence does not support a conclusion that PVC is consistently worse than alternative materials on a life cycle environmental and health basis.”

Neither vinyl nor any competing material deserves to be eliminated based on the current body of knowledge, according to the Task Group.

In reviewing the report, Tim Burns, president of the Vinyl Institute said, “This report shows a great amount of detailed analysis. We will study the report in depth, but our preliminary sense is that the (USGBC) Task Group took a comprehensive scientific approach.”

3: Is the chlorine in PVC dangerous?

Although chlorine at high levels is toxic, it has long been used beneficially at low levels. In fact, it is essential to clean water and the elimination of typhus and other water-borne diseases. The chlorine component in PVC is not dangerous because it is chemically bound to the backbone of the polymer.

Patrick Moore has been an environmental scientist for more than 30 years. A founder of Greenpeace and founder and current director of Green Spirit, Moore is now focusing his energies on developing a rational, logical, science-based approach to decisions we make about moving to a more sustainable civilization and society.

According to Moore, “Because when you look at PVC and the positive uses it has in our society, chlorinated water in a PVC pipe is about the safest way you can deliver water to the public.”