



**Ontario  
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# Designers Need to do More Than Reference a Standard

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On a regular basis the professional engineers at Ontario Concrete Pipe Association are presented with specifications for drainage systems that do little more than reference a national or provincial manufacturing standard for a particular type of pipe. Typically in Ontario, the referenced standards are developed by the Canadian Standards Association or Ontario Provincial Standards. Design engineers charged with designing our province's infrastructure need to do more than just reference a standard. Specifically for drainage systems and sanitary sewers, designers need to recognize that successful projects demand three key elements:

- **Quality pipe**
- **Sound engineering and design**
- **Proper installation and post installation inspection**

In order to achieve this, comprehensive specifications are required that address all three elements regardless of the pipe material or pipe system that is being used. For the purposes of this article the designer is urged to consider the following information and disclaimer from Canadian Standards Association (CSA).

The Canadian Standards Association is a not-for-profit, membership-based association serving business, industry, government and consumers in Canada and the global marketplace.

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**The user of such a standard, namely the design engineer, should be under no illusion: The Canadian Standards Association or any similar body is NOT accepting any responsibility for his/her design.**

The engineers at Ontario Concrete Pipe Association have over 60 years combined experience in the gravity pipe and precast industries. We make this experience available to designers and project managers through our Lunch and Learn program. We address the three essential elements listed above for successful drainage and sanitary sewer projects and provide recommendations to the designers to protect himself or herself from litigation. 

References:

1. [www.csa.ca](http://www.csa.ca)
2. Canadian Standards Association – Legal Notice for Standards