RUSSELL STONE PRODUCTS

2640 GREENVILLE PIKE GRAMPIAN, PA 16838 Phone: (814) 236-2449 Fax: (814) 236-7482 Email: dan@russellstoneproducts.com

Class II Quarzitic Sandstone

Russell Stone is proud of the fact that our sandstone is classified as a Class II Quarzitic Sandstone. That presents the question that most people ask:

What is a Class II Quarzitic Sandstone?

Our Class II Quarzitic Sandstone contains a higher proportion of quartz grains than many other (Class I) Sandstones and delivers performance closer to that of a Quartzite or Granite than that of a normal sandstone in all applications. The weathering durability of our Class II sandstone products far exceeds that of more common Class 1 sandstone materials. On top of this, we can offer this high level of performance in a wide range of colors.

The high strength of a Class II Sandstone allows for a far wider performance range for design applications than a regular sandstone. It is much stronger in flexure and can perform in more strenuous applications. That is displayed by many railroad bridges that have been built in with our stone. The Rockview bridge in Harrisburg Pa is a great example. It was constructed in the late 1800's and has had numerous trains travel daily for over 100 years. The railroad bridges are still viable today.

The heavy quartz grain composition of our stone gives our products an abrasion resistance far higher than that of regular sandstones, so when used in a paving application it will resist wear. Furthermore, it has a far greater resistance to damage from de-icing salts than Class I Sandstone products. That is very evident in the steps at the Philadelphia Museum of Art which were installed in the 1920's and are salted numerous times per day during the winter and are still in use today, looking like they were recently installed, a testament to the Class II Sandstone. Physical requirements published by ASTM for stone used in paving areas with heavy foot traffic do not recommend the use of Class I sandstones.

Class II Sandstone has a much lower absorption rate and higher density than regular sandstone making it a much better choice for applications where freeze-thaw exposure may be a concern. Both previous examples, the Philadelphia Art Museum steps and the railroad bridges are testimony to the durability through freeze and thaw both preforming at 100 years plus in extreme weather conditions. Our Class II stone was used recently in the C & O canal when replacing the original sandstone in several locks because of its weathering and durability. Last year it was used to replace the original stone at the Rideau Canal in Canada.

The compressive strength of our Class II Sandstone is two to three times as strong as the majority of Class I sandstone materials and performs at nearly the level expected of a Quartzite or Granite. As such, the design applications for Class II Sandstones are far wider than a typical sandstone. When high compressive strength is needed for a project, our Class II sandstone can perform for you at a fraction of the cost of Granite.

We are the only Class II Quarzitic Sandstone that we know of, and our sandstone has just been Classified as Type III EPD.