

The Benefits of Utilizing QR Codes on Construction Jobsites to Conduct Punch

Insiders Perspective:

- “It helps in adding clarity and making sure that something is communicated holistically to a trade partner”
- “A big benefit to it is just having it be accessible to everyone on a project because a lot of the time you will have a foreman receiving it (the punch list), but by the time you are getting later into closing punch items you are not going to have a full crew out there. So it is an easier way to have that information already located in a place that can be accessed by anyone in that company”
- “Efficiency. It just makes the punch list so much faster to create because all you need to do is scan the qr code once and then you can just add an item, take a photo, save, add an item, save, add an item, save, and then go to the next room and repeat the process with that QR code”
- “Architects appreciate it because it is a more streamlined way to create punch items”

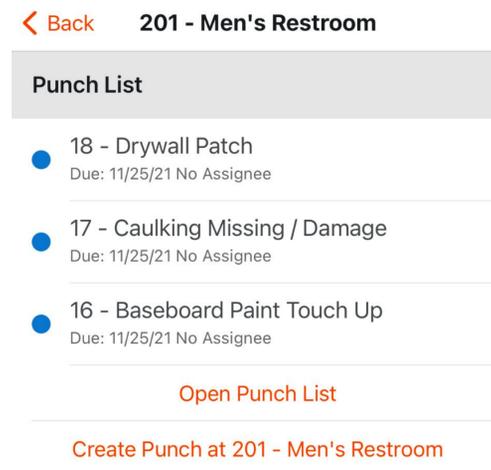


Figure 2: Once the QR code is scanned, open punch items can be seen and new items can be added.

Abstract

The punch process of construction is a very important task that a project team is faced with before a project can be closed out. If not closely managed, open punch items can drag out the completion of a project. Closing out punch is often seen as a tedious task for project engineers. The industry has not seen much change as to how this process is conducted until recent advancement of construction technology has allowed for a more efficient way of conducting this process. In this paper I will take a deeper look into the benefits seen from utilizing Procore’s location based quick response (QR) codes to manage the punch process of a project. Through personal use and interviews with employees of a well established Bay Area general contractor I have found that using QR codes to execute punch can be greatly beneficial to all key players involved on a project. Using QR codes to create punch lists enhances efficiency by streamlining data communication onto one platform that can be accessed by all of the players involved. It allows for general contractors to get ahead on pre-punch items, makes the punch walk more efficient, and allows for that information to be easily transferred to and accessed by subcontractors during their back punch.

Keywords: Streamline, Project Management, Efficiency, QR Codes, Communication



Figure 1: Location based QR code that is posted on the wall of the corresponding room or area in the building.

Key Benefits:

- Allows for a head start on pre-punch
- More efficient punch walks
- Streamlines punch list distribution
- Information is easily accessible by everyone
- Information is not lost between the punch walk to the trade partner receiving it
- Helps facilitate work to complete on back punch

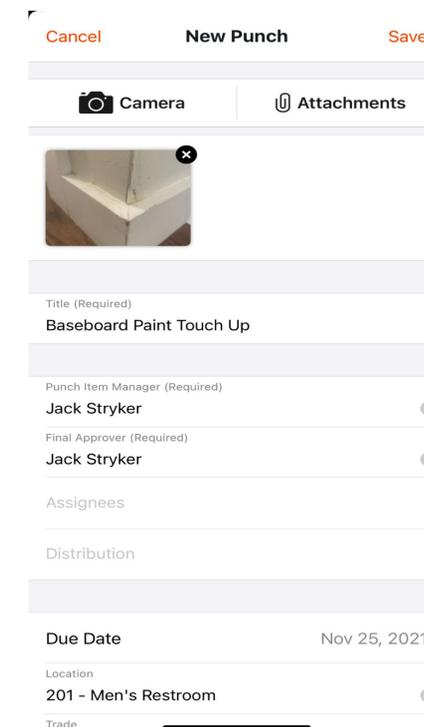


Figure 3: This is the screen that the project engineer will see when they click on, “create new punch item”. Here they will take a photo of the item, name it, write a description, and then assign it to a subcontractor. When they click save it will be automatically distributed to the assigned subcontractor.