

WARNER'S CORNER

PAY ATTENTION



JAMES WARNER

That's right, pay attention to what you hear—everything you hear. It might not be of much value, but how do you know if you don't listen and really understand what is being said? After all, hearing is fundamental to learning, second only to what we see. An old cement mason told me a very long time ago that listening and understanding what you hear is the easiest way to learn. And he further admonished: never consider anyone unworthy of useful knowledge, regardless of education or social standing. "Even damned fools have good ideas sometimes," he would often repeat. I have never forgotten his examples and have benefited greatly from his wisdom.

A huge problem I see in our industry is the lack of communication between workers in the field and those in higher positions. I think one of the biggest mistakes we make, especially those with considerable education or position, is failing to communicate with those of lesser status, especially workers in the field. And yet, these are the people who know more about what has transpired on the job than anyone else; after all, they are the ones who make the specified materials and procedures work as intended (or not). Who could possibly have greater knowledge of the details of the actual construction?

A great example is a project on which I consulted many years ago. It involved a huge structure under construction. Concrete from a major placement exhibited extensive honeycomb on the surface, and there was fear it could not perform satisfactorily. Work was shut down, many consultants were brought in, and extensive testing was performed; but a real understanding had not yet been reached. In fact, demolition and reconstruction costing several million dollars was being seriously considered. The work had been shut down for some time and only the superintendent and one old laborer remained.

When I asked the laborer if he had any ideas of what might have caused the problem, he answered to the effect of "ya don wanna know what I noz, cuz I ain't sponse to noz nutten." I inquired whether he had much experience working with concrete, to which he replied, "Iz been workin with z-ment fur bout 50 yars." In further conversation, starting with small talk and employing my poorest grammar, I encouraged him to explain exactly what had happened that resulted in the poor

visible surface. "Day wood'en listen," he said several times, apathetically, but with a certain sadness in his voice. More importantly, however, he explained exactly what had happened and why the defective concrete was limited to the surface. He also stated that a photographer was present and had taken many photos of what had transpired.

The reinforcing was extremely closely spaced and congested, even on the top surface of the large beams being cast monolithically with the slab. Furthermore, the concrete contained aggregate larger than the space between the individual reinforcing bars. And to make it worse, the vibrators they were furnished had large heads that would not fit between the reinforcing bar and form. Doing the best they could, the placing crew separated the bars on top of the beams sufficiently to get good placement and compaction on the interior, but the large aggregate and reinforcing bar prevented good filling adjacent to the form. They thus "washed in" this "covercrete" with a water hose, doing the best they could, but they knew it would not turn out well. And it certainly didn't!

Now, this nearly illiterate laborer was not the type who would normally impress educated folks, yet it was he who identified the problem. No individual can work with concrete for nearly 50 years and not know a good deal about it. But, more importantly, he was the only one available who was present during the actual placement and knew exactly what had happened. Because of his disclosures, and backed up with the photos he told me about, a repair plan was adopted and the structure completed. And, remarkably, had the client only listened and understood its own employee, the needless waste of time and the costly investigation would have been avoided.

Let us listen and understand all that we hear!

James Warner, PE, is an independent Consulting Engineer specializing in foundation and structural restoration and repair. Formerly a contractor in these specialties, he organized the original concrete repair program for World of Concrete and presented those seminars for 19 years. It was at one of his seminars that the seeds were sown for what is now the International Concrete Repair Institute (ICRI). He continues an active consultancy and is an Honorary Life Member of the Institute.