FOR DESIRABLE RESULTS AND LONG PAVEMENT LIFE, PROPER TEMPERATURE CONTROL IS KEY.

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THERE ARE MULTIPLE OPPORTUNITIES TO ENSURE PROPER ASPHALT MIX TEMPERATURE during production and placement. Performing a few relatively easy tasks is a simple way to produce mixes within the established temperature parameters. Where mixes have been produced outside of tolerance, it is often the case that temperature variations could have been detected, the proper personnel notified, and adjustments made to allow production to move forward correctly.

PRODUCING A MIX AT THE PROPER TEMPERATURE STARTS PRIOR TO PRODUCTION. First, we must recognize what information is important to relay to all parties, such as what mix design will be used and what asphalt binder is incorporated in the design. Second, because many producers face the challenge of having to produce multiple types of mix on the same day, it is important to pay close attention to the details. For example, warm mix has a lower target temperature than traditional hot mix.

Finally, we can ensure we are achieving targeted temperatures during a normal production day in these ways:

- At the beginning of the shift and during production, the mix temperature can be monitored at the drum discharge point, prior to entering the silos, before mixture is ever dropped into a hauling vessel.
- Once the mix is discharged into a haul truck, the temperature can be checked once again for specification compliance before it leaves the yard.
When haul trucks arrive on the job site and start to offload into an material transfer device or paver, temperatures should be checked again.

As the mix is being laid, constant temperature monitoring should be performed to check for hot or cold spots.

Producing asphalt mix at an improper temperature can alter the liquid asphalt binder characteristics and negatively impact compaction efforts on the roadway. Communication between the plant and roadway crews is critical to ensure adjustments are made as needed. Temperature changes could be necessary due not only to plant-produced temperatures being too high or too low, but also because of weather conditions. Temperature segregation can adversely affect pavement life and ride quality. It is in the best interest of all parties involved to work together as a team to try to produce from start to finish the best product possible.