

QUESTION SET ONE
NASA Ames Research Center

Title: TPS FOR MARS ENTRY DESCENT AND LANDING - **ROUND 1 PHASE 2**
Solicitation: NNA11369016Q

Question (for Round 1 Phase 2 only):

We recognize that the SOW specifies the thermal test conditions (450 to 500 Watts/cm² for 50 to 60 seconds), the target back face temperature response (250°C), and the total mass of the material samples to be delivered (1550 ± 100 gms). However, we would like to know if NASA will accept proposals for material samples that are lower in mass than the specified range provided that the samples meet the target temperature response under the specified test conditions?

NASA Response:

If the vendor's material has a lower density then it will have less mass than PICA. It is permissible for the vendor to reduce the thickness of their sample (and thus the overall weight) to achieve a maximum backface temperature of 250C. Thus, vendors may use thermal data to optimize their systems.

End of Question Set One