

2022 PROFICIENCY SAMPLE & TESTING INSTRUCTIONS



SB201, SB202 MIX DESIGN SPECIALIST



SB 201 certified specialists are required to perform Tex-113-E, Laboratory Compaction Characteristics and Moisture-Density Relationship of Base Materials and will only use the Site Manager template TX113,4. SB202 certified specialists are required to perform both Tex-113-E and Tex-117-E, Part II, *Accelerated Method for Triaxial Compression of Soils* and will only use the Site Manager template TX117. One sample is provided to each individual certified specialist who is responsible to conduct the required testing as stated above. Failure to participate in this program will cause your certification to become inactive.

TEX-113-E, LABORATORY COMPACTION CHARACTERISTICS AND MOISTURE-DENSITY RELATIONSHIP OF BASE MATERIALS

1. Use all the flexible base material for the sample provided to perform Tex-113-E. Each individual sample weighs 17.65 lbs.
2. Dry each sample in an oven heated to 230°F to a constant mass and let cool to room temperature prior to any preparation and testing.
3. Add 7.0% moisture to the sample.
4. The SCA system is required for the compaction of the sample provided. Save the raw data files produced by the SCA program for future reference.
5. If certified in only SB 201, report all results using the Site Manager form TX113,4 that is available at the following website: <https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html>
6. Report results to the following accuracy:

| | |
|----------------------|-------|
| Sample Height (in.) | 0.001 |
| Wet Density (pcf) | 0.1 |
| Moisture Content (%) | 0.1 |
| Dry Density (pcf) | 0.1 |
| Total Energy | 0.01 |
| Energy/Lift | 0.01 |
| Ave. Drop Ht. | 0.01 |
| No. of blows | 1 |

2022 PROFICIENCY SAMPLE & TESTING INSTRUCTIONS

TEX-117-E, PART II, ACCELERATED METHOD FOR TRIAXIAL COMPRESSION OF SOILS

1. Perform Tex-117-E, Part II section 11.6.4 for compressive strength testing.
2. Determine the compressive strength with 0 psi lateral pressure.
3. If certified in both SB 201 and SB 202, report all results using the Site Manager form Tx117.xlsm that is available at the following website:
<https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html>
4. Report results to the following accuracy:

| | |
|----------------------|-------|
| Sample Height (in.) | 0.001 |
| Wet Density (pcf) | 0.1 |
| Moisture Content (%) | 0.1 |
| Dry Density (pcf) | 0.1 |
| Total Energy | 0.01 |
| Energy/Lift | 0.01 |
| Ave. Drop Ht. | 0.01 |
| No. of blows | 1 |
| UC strength, psi | 0.1 |

Certified specialists are required to submit their test results at: <https://www.txhmac.org>

If you have any questions, please call 512-312-2099.

The deadline to submit you results is **November 2nd, 2022.**

2022 SB201 & SB202 PROFICIENCY WORKSHEET

Use this worksheet to report and calculate your proficiency results. Keep this worksheet until you have received your final proficiency report. Submit your test results and upload this worksheet at www.txhmac.org by November 2nd, 2022.

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|-----------------------------|--|
| CERTIFIED SPECIALIST | |
| CERTIFICATION # | |
| DATE: | |

TEX-113-E, LABORATORY COMPACTION CHARACTERISTICS AND MOISTURE-DENSITY RELATIONSHIP OF BASE MATERIALS

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| Percent water content (0.01%) | |
| Dry mass of material (lbs.) | |
| Mass water added (lbs.) | |
| Wet mass of specimen and mold (lbs.) | |
| Tare mass of Mold, Base, and collar (lbs.) | |
| Wet mass of specimen (lbs.) | |
| Height of specimen (0.001 inches) | |
| Volume of mold (Linear mm/in) | |
| Volume of specimen (0.0001 ft ³) | |
| Wet Density of specimen (0.1 pcf) | |
| Wet mass of pan and specimen (lbs.) | |
| Dry mass of pan and specimen (lbs.) | |
| Tare mass of pan (lbs.) | |
| Dry mass of material (lbs.) | |
| Mass of water (lbs.) | |
| Moisture content (0.1 %) | |
| Dry density (0.1 pcf) | |

TEX-117-E, LABORATORY COMPACTION CHARACTERISTICS AND MOISTURE-DENSITY RELATIONSHIP OF SUBGRADE, EMBANKMENT SOILS, AND BACKFILL MATERIAL

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| Unconfined compressive strength (0.1 psi) | |
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