Retroreflectivity Comparison Panel Kit

The WV LTAP has provided this retroreflectivity comparison panel kit. It was designed adapting procedures developed by the Cornell Local Roads Program, NY LTAP.

Using the Comparison Panels

- Comparison Panels should be used as a supplement to a visual nighttime inspection.
- During the inspection, classify sign retroreflectivity as good, poor, or questionable.
- Take signs that are identified as poor out of service as soon as feasible. Use the comparison panel to inspect signs that are identified as questionable.

Caring for Your Kit

- The foam insert with separate slots and the storage box are designed to help keep the comparison panel kit in top condition and prevent scratching and scuffing of the panels.
- When removing the panels from the storage box, grab them by the side.
- When attaching the panels, only use clamps with rubber tips on the black tape portion.
- When you have completed the sign inspections, store the comparison panels back in the provided box. Insert the panels into the foam by placing them tape side down. Only place one panel per slot.



This photo showing panel use was taken during the day for clarity, but an actual inspection will need to be done at night.

WV Local Technical Assistance Program

Phone: 304-293-9924 or 9939

Email: wvltap.wvu.edu • Website: wvltap.org

Equipment Needed

Sign Panels, Clamps, Flashlight (Halogen recommended)
Step Ladder (if needed for taller signs)
Container (to store/protect the panels, clamps, & flashlight)

Inspection Process

- 1. Identify the questionable sign during a nighttime inspection.
- 2. Attach the appropriate colored comparison panel or panels at the tape location to the sign using clamps.
- 3. Step back from the sign face approximately 15-25 feet. Place the flashlight (halogen recommended) next to your ear, and shine the light toward the sign/comparison panel combination.
- 4. If the comparison panels are brighter than the sign, the sign should be replaced.
- 5. If the comparison panels are nearly the same brightness, the sign is near its functional life and should be identified as one to re-inspect or replace in the future.
- 6. If the sign is brighter than the panels, the sign is good until the next annual inspection.
- 7. Document the inspection of every sign including conclusions found when using the comparison panels and actions taken based on the conclusions of the inspection. Inspections are important, but they meaningless in court if they have not been documented.







Please note that these photos showing panel use were taken during the day for clarity, but an actual inspection will need to be done at night.

Follow work zone and other safety measures.