

Rating System: Vandal Resistance of Interpretive Panel Materials

Surface Graffiti

Resistance (R): How easy is it to mark up the sign?

- 5: **Most resistant:** Requires significant effort to make a mark that sticks.
- 4: **More resistant:** Higher than average amount of effort is needed to make a mark.
- 3: **Average resistant:** Average amount of pressure is needed to make a mark. Must be intentional.
- 2: **Less resistant:** Small amount of pressure is needed to make a mark.
- 1: **Least resistant:** Casually running pen/marker/lipstick makes an obvious mark on surface. Easy to make mark accidentally.

Usability (U): How well does the sign still communicate with a mark?

- 5: **Most usable:** Message/graphics can still communicate beneath mark. Mark is mostly transparent and not noticeable.
- 4: **More usable:** The mark is noticeable, but only partially obscures the graphics/message underneath.
- 3: **Average usable:** The mark is obvious and obscures at least some part of the message, but other areas are still readable.
- 2: **Less usable:** Most of the messages/graphics are obscured by the mark.
- 1: **Least usable:** Message/graphics are completely obscured by mark. No communication is possible with significant coverage.

Fixable (F): How easy is it to remove the mark?

- 5: **Most fixable:** Soap and water with minimum scrubbing removes the mark.
- 4: **More fixable:** Gentler chemicals (like citrus-based cleaners, Goof-off) with minimum scrubbing required to remove mark
- 3: **Average fixable:** Harsher chemicals (like mineral spirits) and hard scrubbing (with scouring pad) required to remove mark
- 2: **Less fixable:** Chemicals and scrubbing make mark more transparent (sign is more readable), but it is not completely removed.
- 1: **Least fixable:** Nothing seems to remove mark. Sign will need replacement.

Burns

Resistance (R): How easy is it to burn surface of the sign?

- 5: **Most resistant:** Flame held in contact for over 20 seconds shows no mark
- 4: **More resistant:** Flame held in contact for 10-20 seconds shows a mark
- 3: **Average resistant:** Flame held in contact for 5-10 seconds shows a mark
- 2: **Less resistant:** Flame held in contact for 1-5 seconds shows a mark
- 1: **Least resistant:** Panels instantly shows a mark when flame is contacted

Usability (U): How well does the sign still communicate with a burn mark?

- 5: **Most usable:** The burn mark is barely noticeable. Message/graphics can still communicate.
- 4: **More usable:** The burn mark is noticeable, but doesn't interfere much with communication.
- 3: **Average usable:** The burn mark completely obscures some part of the message (where heat was the highest) but other areas are still readable
- 2: **Less usable:** Most of the messages/graphics are obscured by the mark.
- 1: **Least usable:** Message/graphics are completely obscured by mark. No communication possible where sign has been burned

Fixable (F): How easy is it to remove the mark?

- 5: **Most fixable:** Burn mark can be easily wiped from the surface
- 4: **More fixable:** Scrubbing and washing removes the burn mark
- 3: **Average fixable:** Scrubbing and washing reduces the burn mark to make it more readable
- 2: **Less fixable:** Scrubbing and washing slightly reduce the burn mark.
- 1: **Least fixable:** Burn mark cannot be removed or reduced. Sign will need replacement.

Disfigurement

Resistance (R): How easy is it to scratch, dent, gouge, or puncture sign?

- 5: **Most resistant:** Requires great pressure or force to scratch/dent sign.
- 4: **More resistant:** Higher than average amount of force is needed to make a scratch/dent.
- 3: **Average resistant:** Average amount of force is needed to make a scratch/dent. Must be intentional.
- 2: **Less resistant:** Small amount of force is needed to make a scratch/dent.
- 1: **Least resistant:** Casually sliding fingernails, keys, or razors across surface or bumping panel with hammer or rock makes an obvious scratch/dent. Easy to do accidentally.

Usability (U): How well does the sign still communicate with a scratch/dent/gouge?

- 5: **Most usable:** Message/graphics can still communicate with scratch/dent. Mark is unnoticeable.
- 4: **More usable:** The scratch/dent is noticeable, but only partially obscures the message underneath.
- 3: **Average usable:** The scratch/dent is obvious and obscures at least some part of the message, but other areas are still readable.
- 2: **Less usable:** Most of the messages/graphics are obscured by the scratch/dent.
- 1: **Least usable:** Message/graphics are completely obscured by scratch/dent. No communication is possible with significant vandalism.

Fixable (F): How easy is it to remove the scratch/dent/gouge?

- 5: **Most fixable:** All small scratches/dents can be buffed out with car/boat wax.
- 4: **More fixable:** Car/boat wax eliminates most scratches/dents, but a few are still noticeable.
- 3: **Average fixable:** Wax helps make small scratches/dents less noticeable, but they still can be seen.
- 2: **Less fixable:** Car/boat wax reduces only a few of the small scratches/dents.
- 1: **Least fixable:** Nothing can remove or reduce scratches/dents. Sign must be replaced.

Breakage

Resistance (R): How easy is it to break the sign (fracture, shatter, smash, shoot)?

- 5: **Most resistant:** Requires great effort to break the sign.
- 4: **More resistant:** Higher than average amount of force is needed to break the sign.
- 3: **Average resistant:** Average amount of force is needed to break the sign. Must be intentional.
- 2: **Less resistant:** Small amount of force is needed to break the sign.
- 1: **Least resistant:** Very little effort required to break... sitting or standing on sign. Easy to do accidentally.

Usability (U): How well does the sign still communicate after it is broken?

- 5: **Most usable:** Message/graphics are still clear. Breakage/shot hardly noticeable.
- 4: **More usable:** Message/graphics are partially obscured after breakage/shot. Breakage/shot somewhat noticeable.
- 3: **Average usable:** Breakage/shot is obvious and obscures some part of the message, but other areas are still readable (part of surface may be shattered)
- 2: **Less usable:** Most of the messages/graphics are obscured by the breakage/shot (most of surface may be shattered)
- 1: **Least usable:** Message/graphics are completely obscured by the breakage. No communication is possible with significant vandalism.

[Fixable (F): Doesn't apply well to breakage. Most signs will need to be replaced. Instead, rate signs on...]

Durability (D): How durable is the sign after being broken/shot?

- 5: **Most durable:** Little damage other than specific broken areas. All areas of sign (including damaged) are still resistant to weather.
- 4: **More durable:** Little damage other than broken areas and/or some areas of sign have been exposed to weathering (laminated, embedded)
- 3: **Average durable:** Some damage to material around broken areas (back of sign gouged, some surface fracture) and/or some areas of sign have been exposed to weathering.
- 2: **Less durable:** More damage to panel material (layers peeling, cracking) and/or exposed areas to weathering.
- 1: **Least durable:** Much of the panel material is damaged by breakage (major surface fracture) and/or has exposed areas that will weather poorly.