

Supplementary Material

Fig. S1. Tensile test results of nonwoven #2: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves;

Fig. S2. Tensile test results of nonwoven #3: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves;

Fig. S3. Tensile test results of woven: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

Fig. S4. Tensile test results of glass fiber geogrid: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves;

Fig. S5. Tensile test results of plastic geogrid: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

Fig. S6. Tensile test results of geomembrane: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

Fig. S7. Tensile test results of geonet: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves;

Fig. S8. Fitting results of secant tensile stiffness of nonwoven #1 under confinement: (a) with friction; (b) without friction;

Fig. S9. Fitting results of secant tensile stiffness of nonwoven #2 under confinement: (a) with friction; (b) without friction;

Fig. S10. Fitting results of secant tensile stiffness of nonwoven #3 under confinement: (a) with friction; (b) without friction;

Fig. S11. Fitting results of secant tensile stiffness of glass fiber geogrid under confinement: (a) with friction; (b) without friction;

Fig. S12. Fitting results of secant tensile stiffness of plastic geogrid under confinement: (a) with friction; (b) without friction;

Fig. S13. Fitting results of secant tensile stiffness of geomembrane under confinement: (a) with friction; (b) without friction;

Fig. S14. Fitting results of secant tensile stiffness of geonet under confinement: (a) with friction; (b) without friction;

Fig. S15. Fitting results of confined tensile load of nonwoven #1: (a) with friction; (b) without friction;

Fig. S16. Fitting results of confined tensile load of nonwoven #2: (a) with friction; (b) without friction;

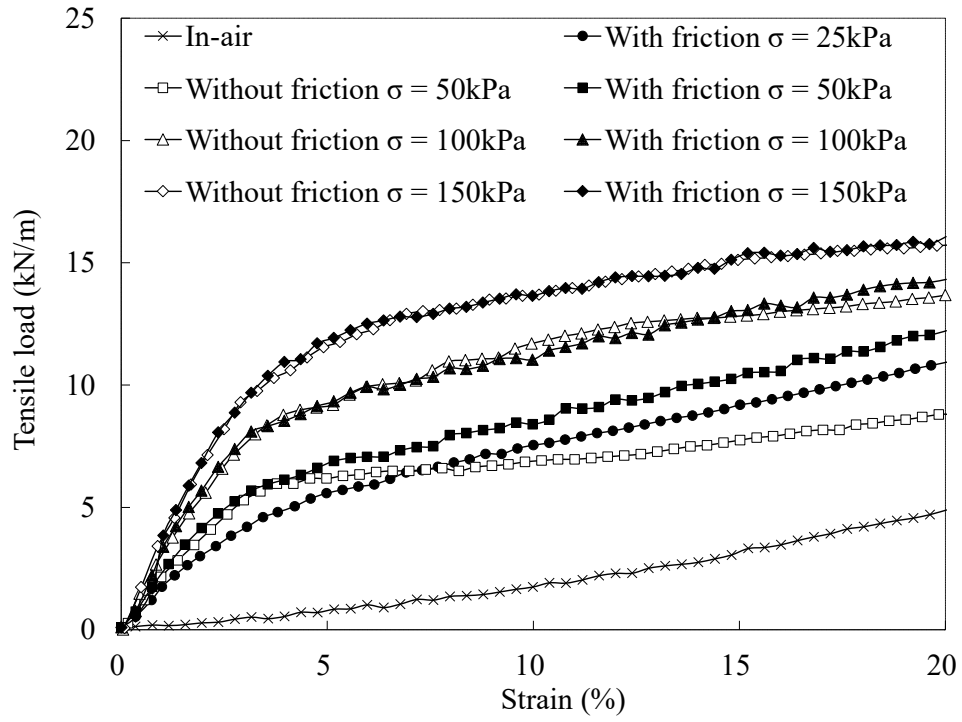
Fig. S17. Fitting results of confined tensile load of nonwoven #3: (a) with friction; (b) without friction;

Fig. S18. Fitting results of confined tensile load of woven: (a) with friction; (b) without friction;

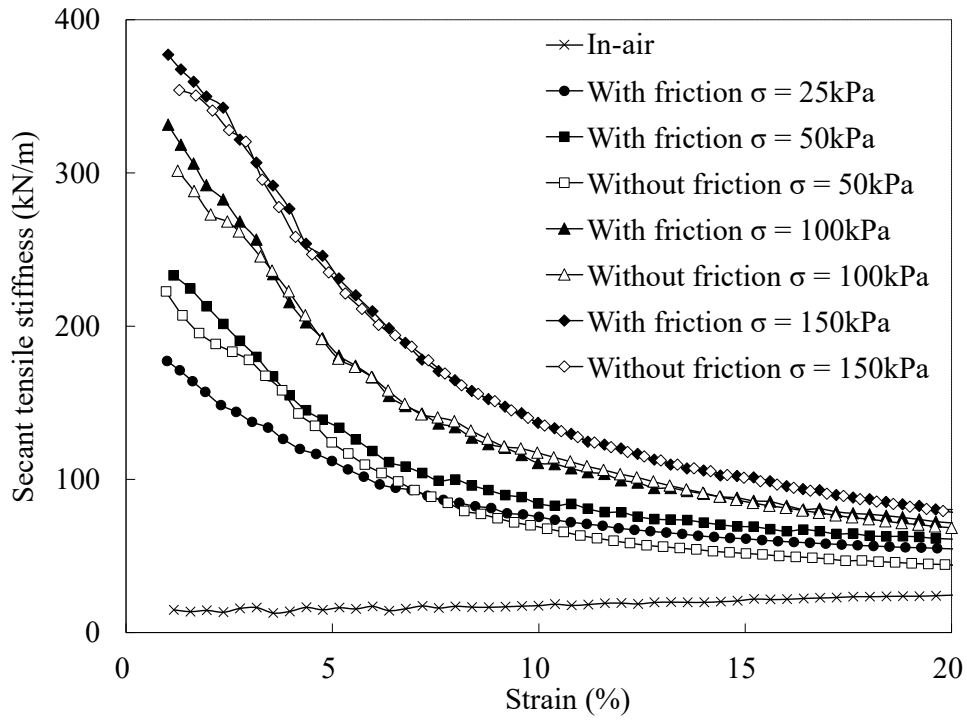
Fig. S19. Fitting results of confined tensile load of glass fiber geogrid: (a) with friction; (b) without friction;

Fig. S20. Fitting results of confined tensile load of plastic geogrid: (a) with friction; (b) without friction;

Fig. S21. Fitting results of confined tensile load of geonet: (a) with friction; (b) without friction.

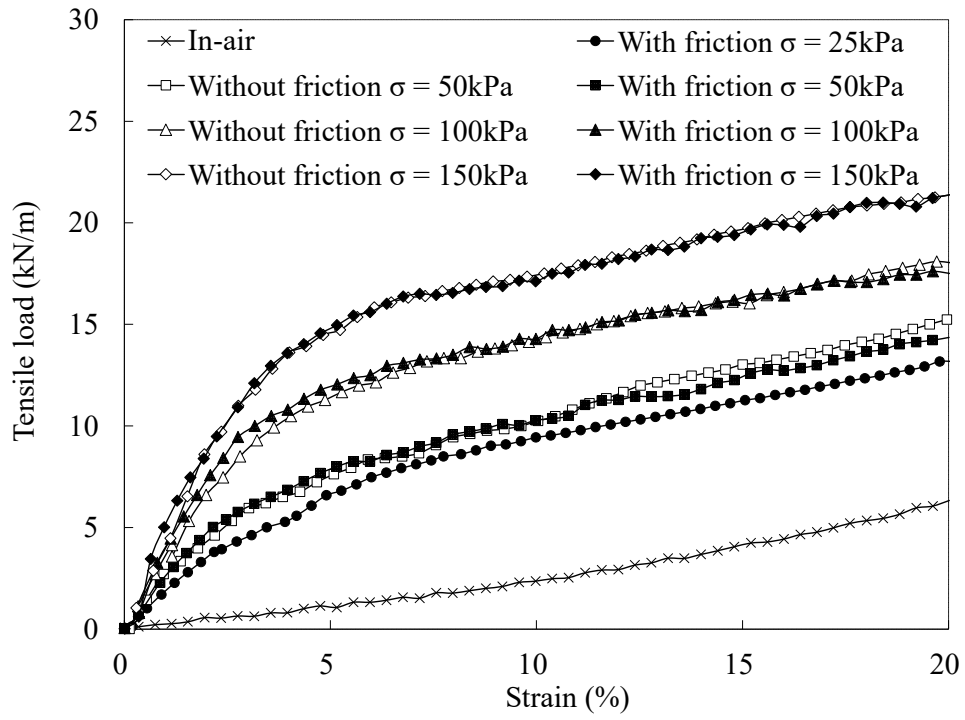


(a)

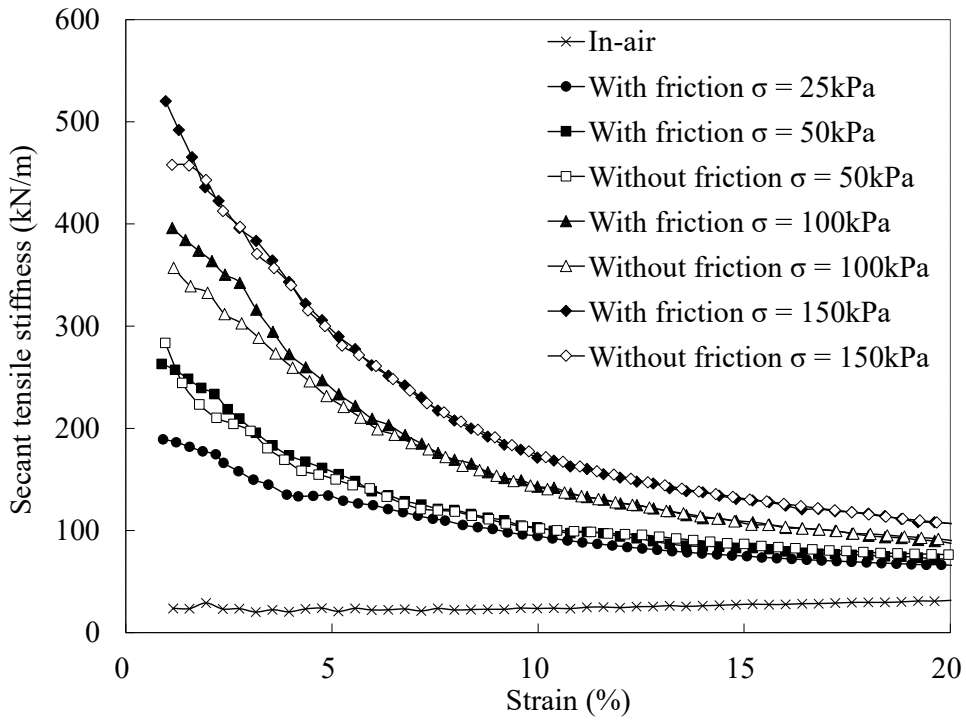


(b)

Fig. S1. Tensile test results of nonwoven #2: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

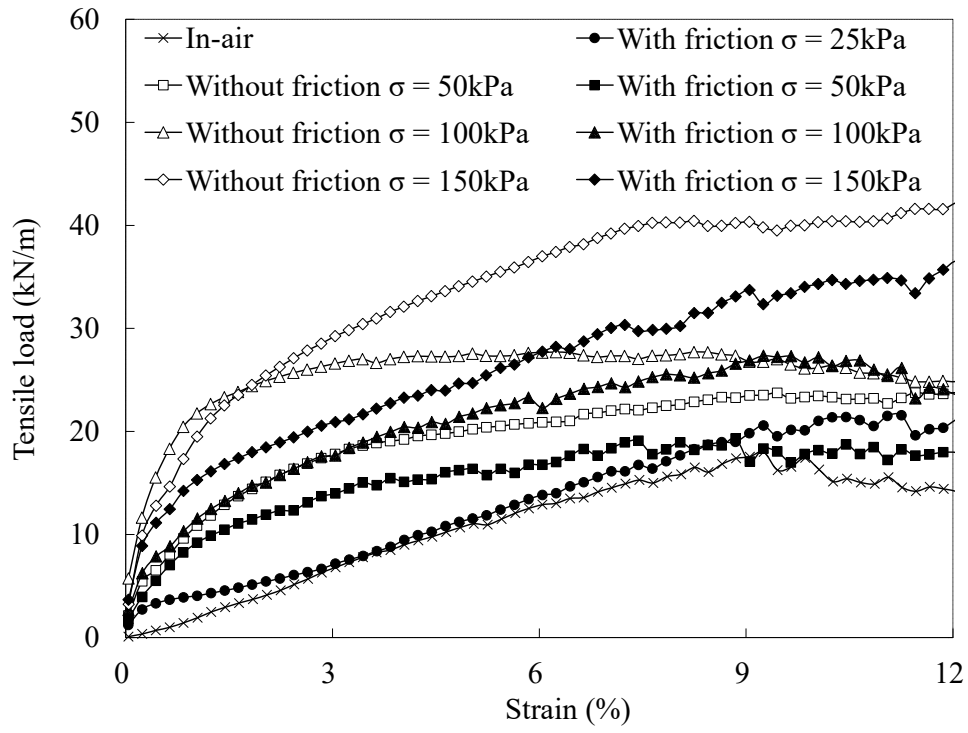


(a)

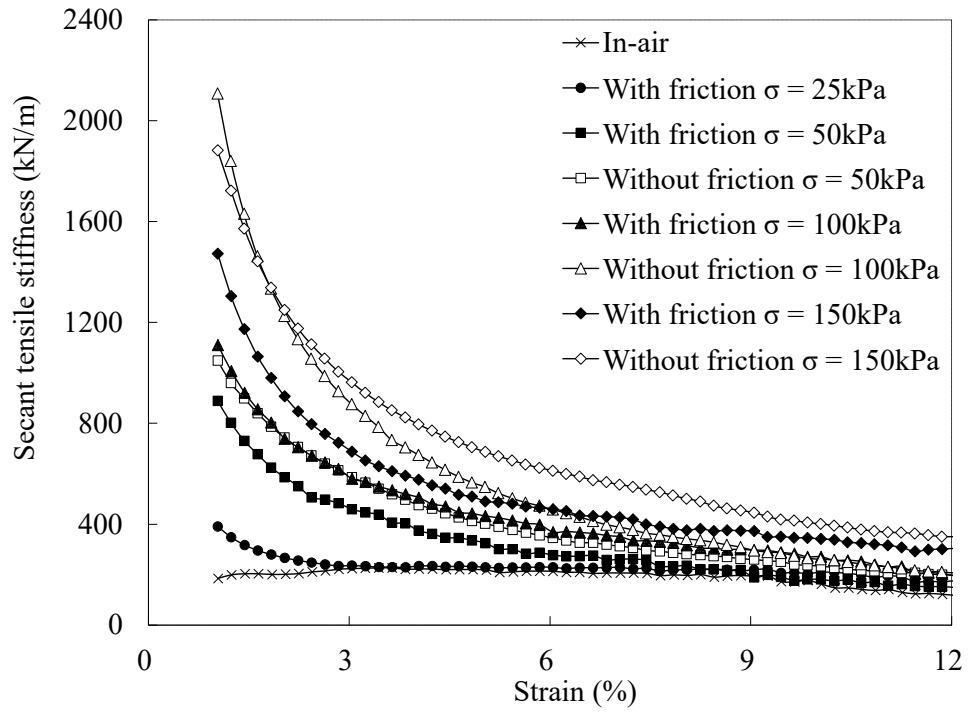


(b)

Fig. S2. Tensile test results of nonwoven #3: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

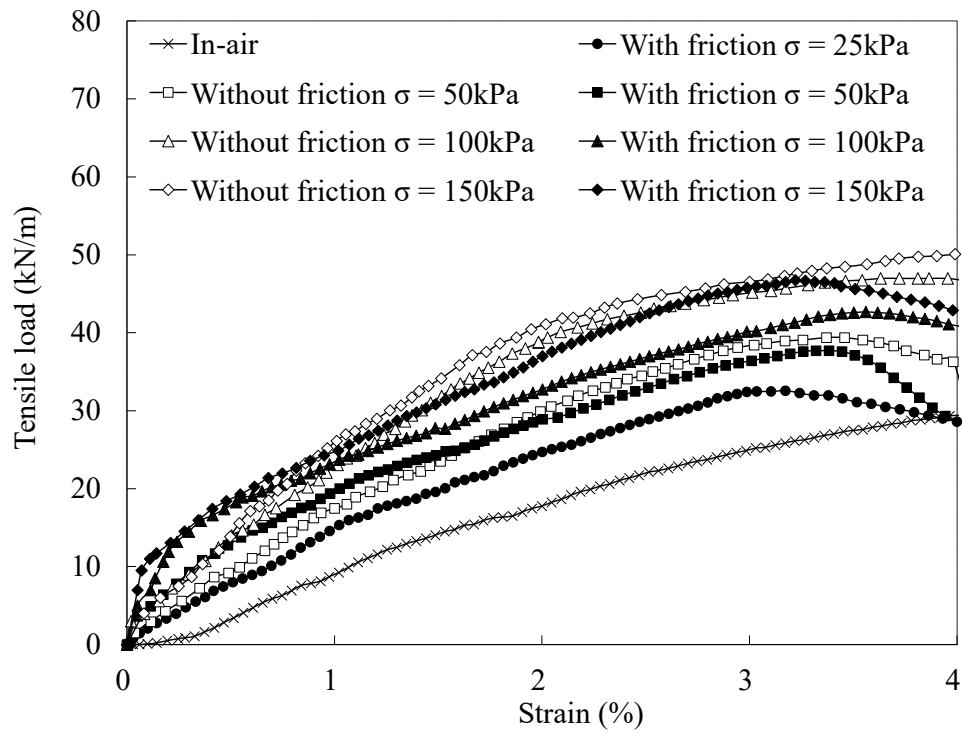


(a)

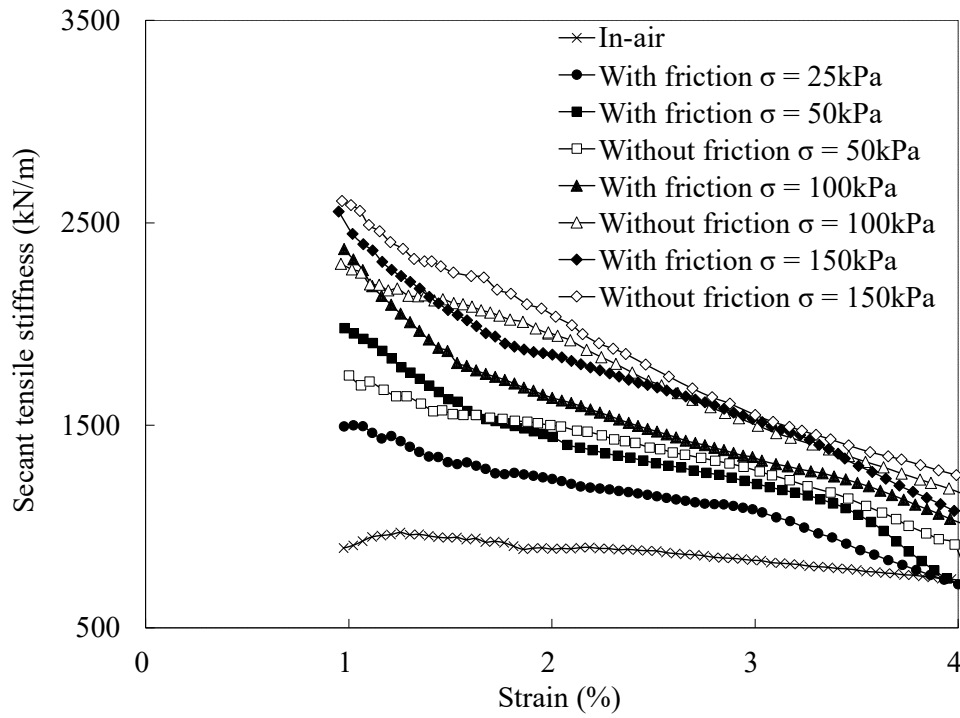


(b)

Fig. S3. Tensile test results of woven: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

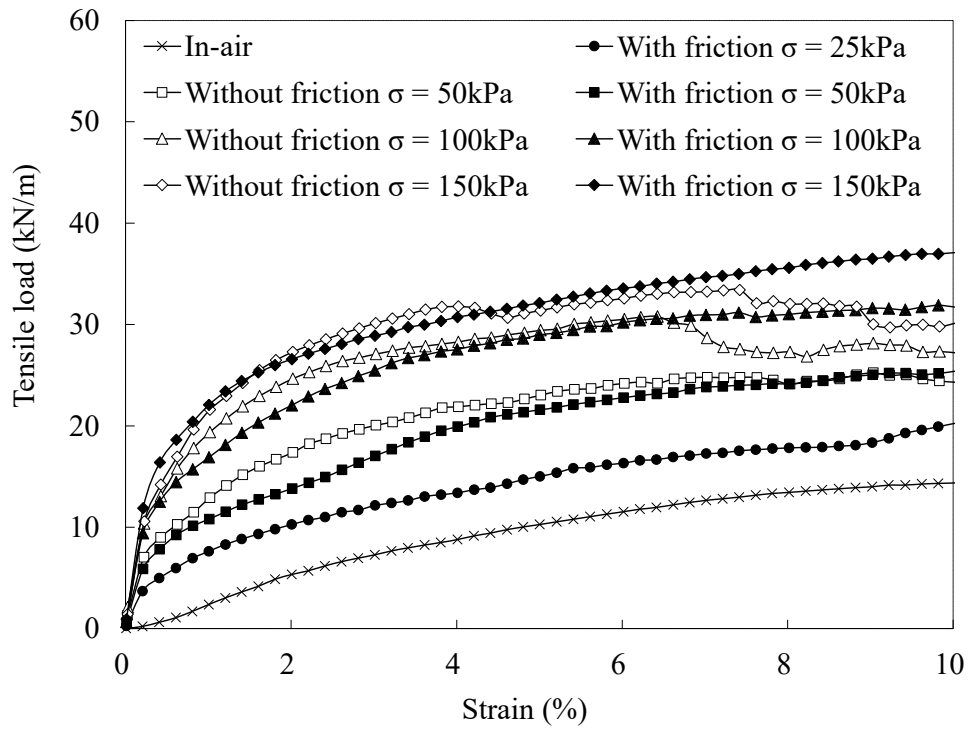


(a)

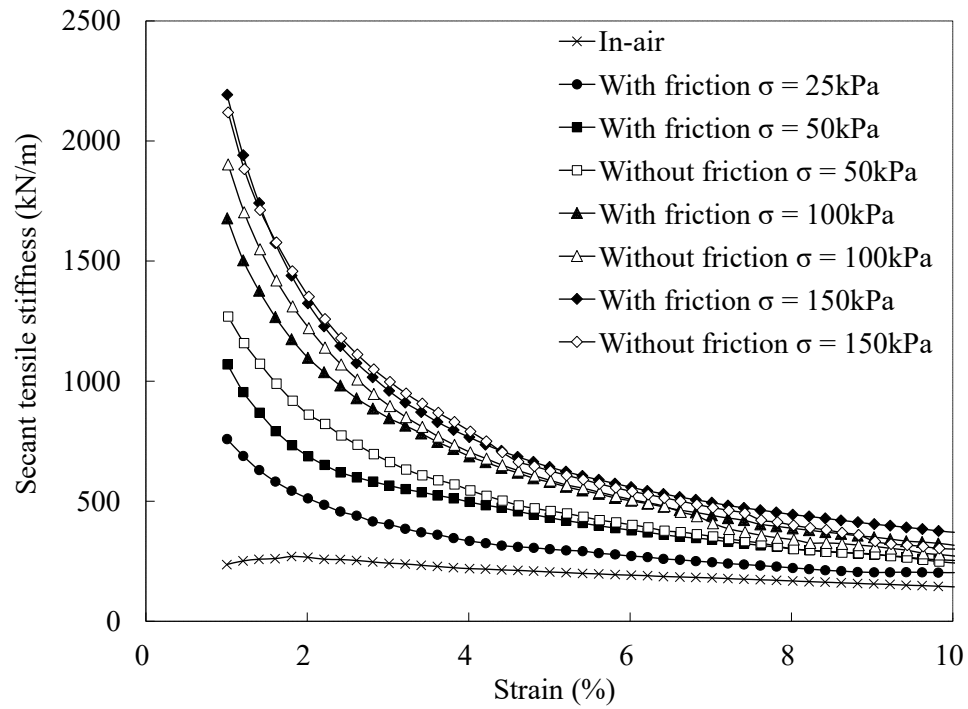


(b)

Fig. S4. Tensile test results of glass fiber geogrid: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

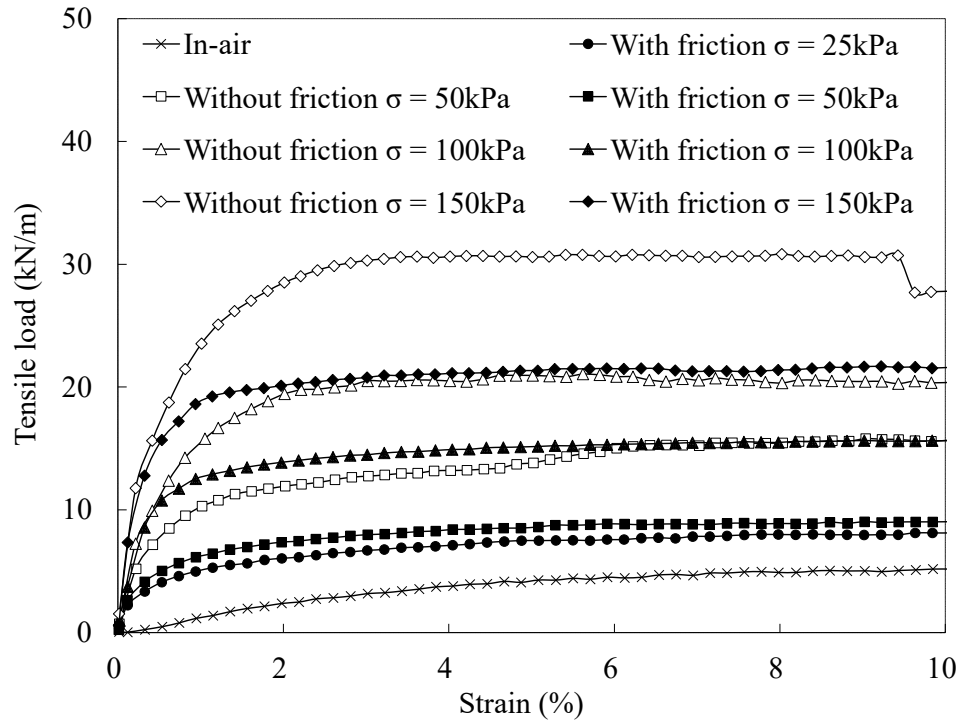


(a)

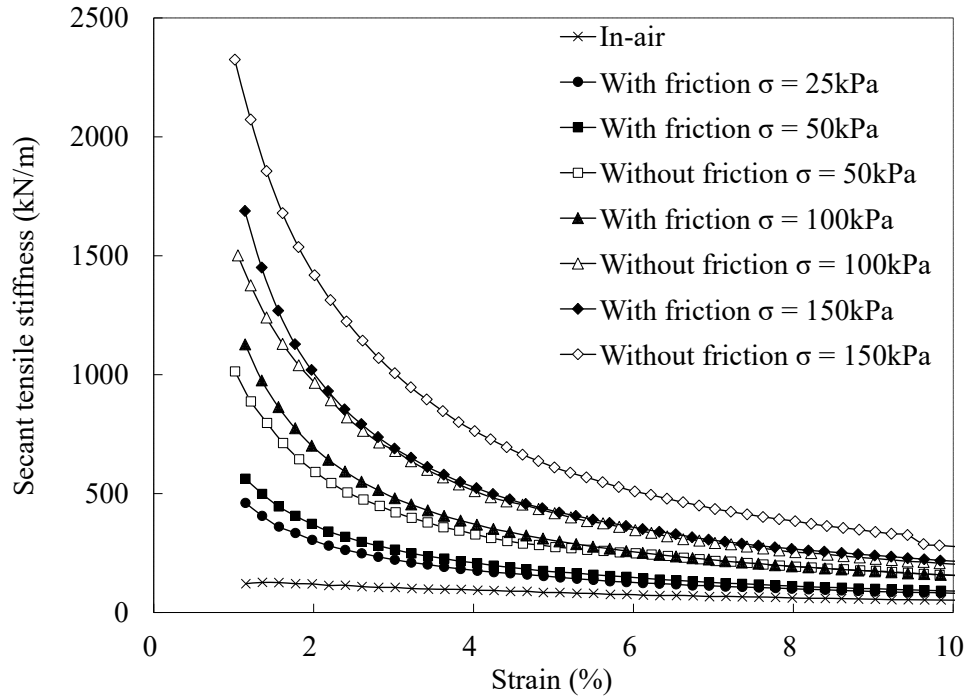


(b)

Fig. S5. Tensile test results of plastic geogrid: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

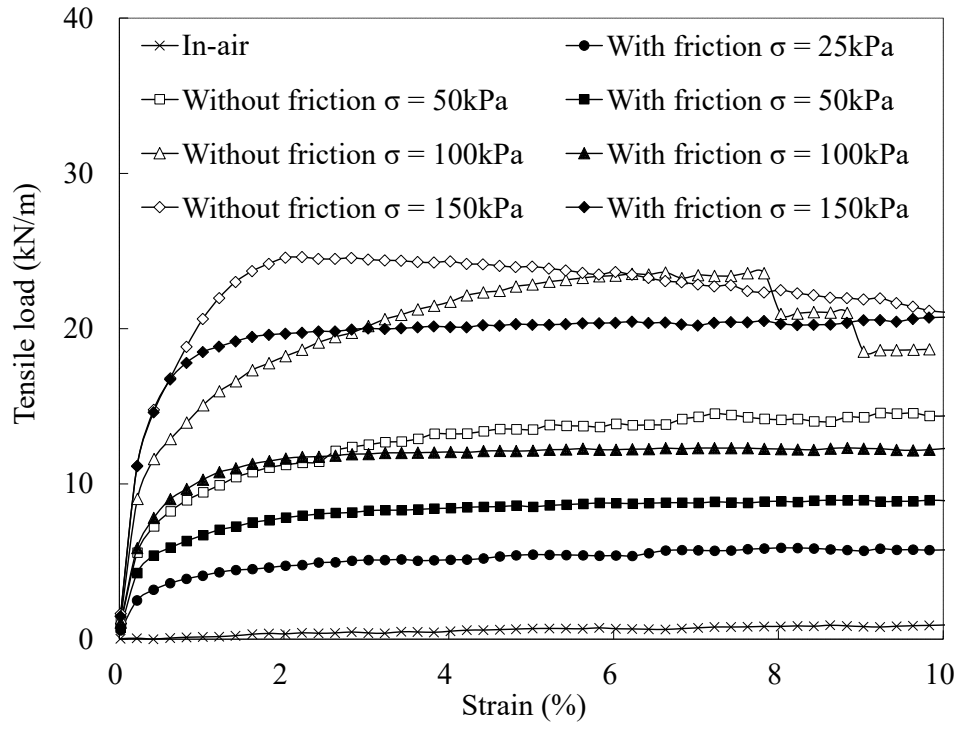


(a)

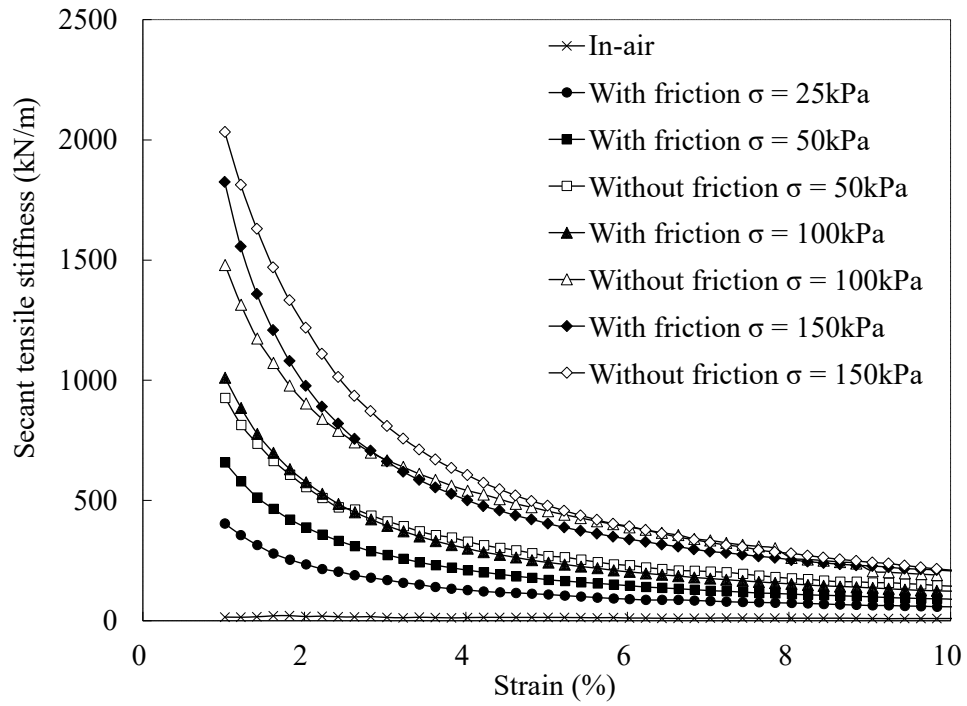


(b)

Fig. S6. Tensile test results of geomembrane: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

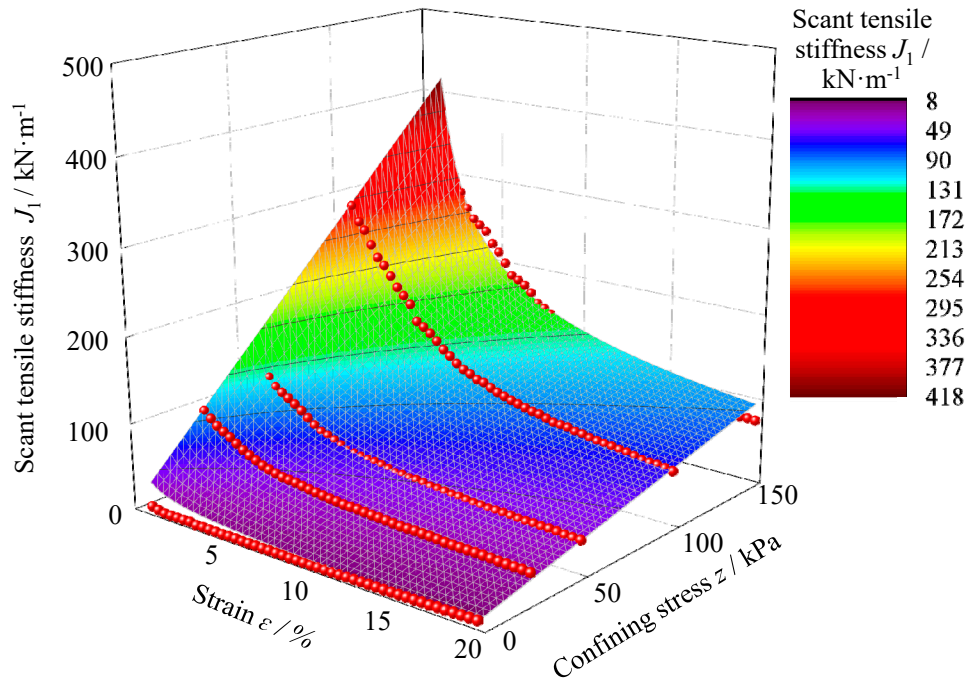


(a)

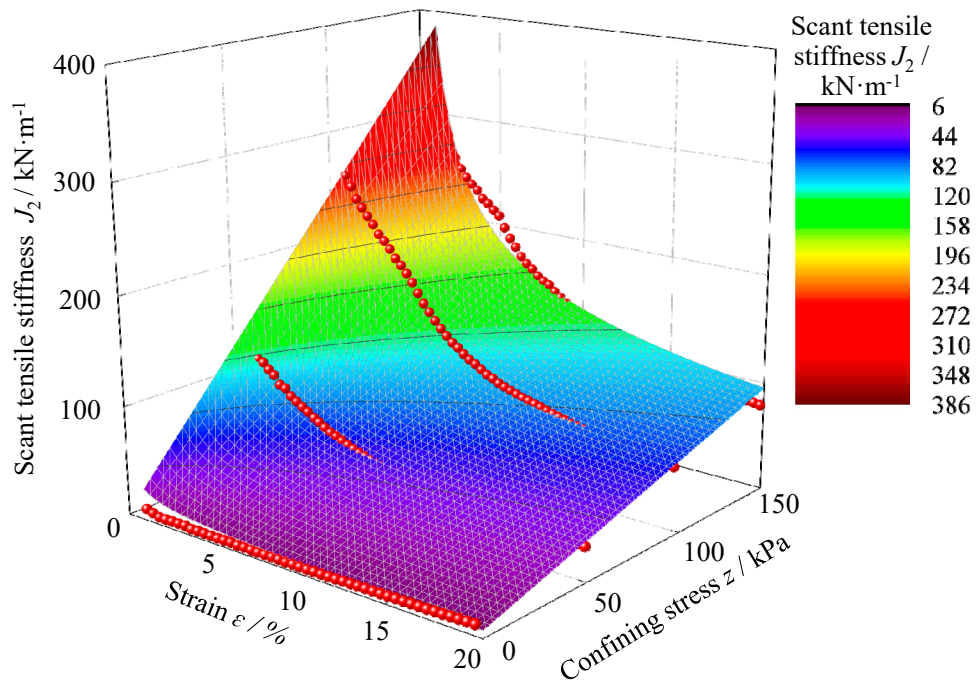


(b)

Fig. S7. Tensile test results of geonet: (a) tensile load-strain curves; (b) secant tensile stiffness-strain curves

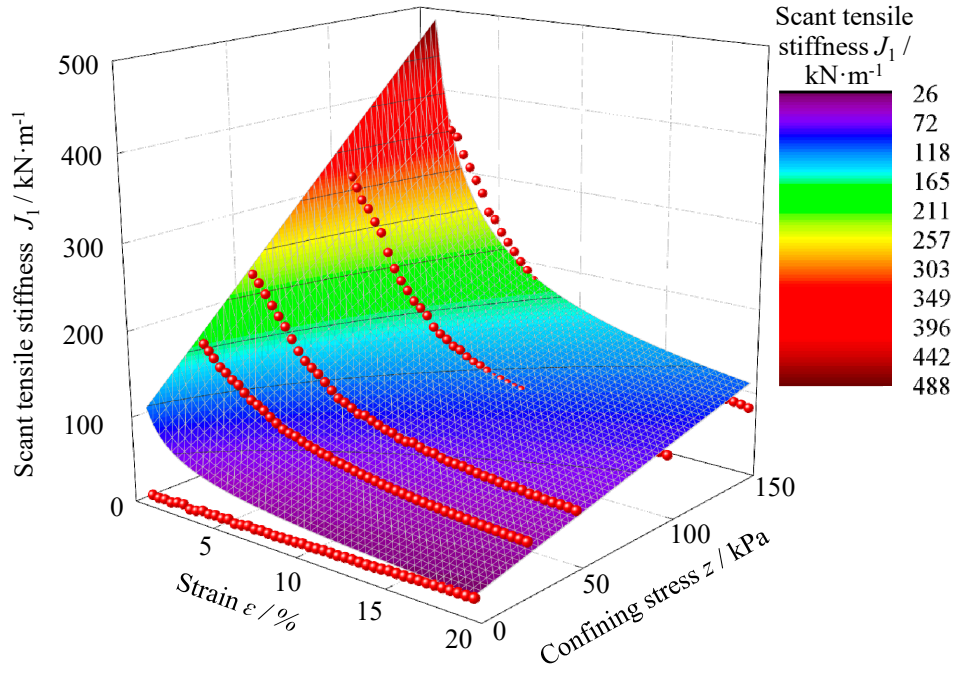


(a)

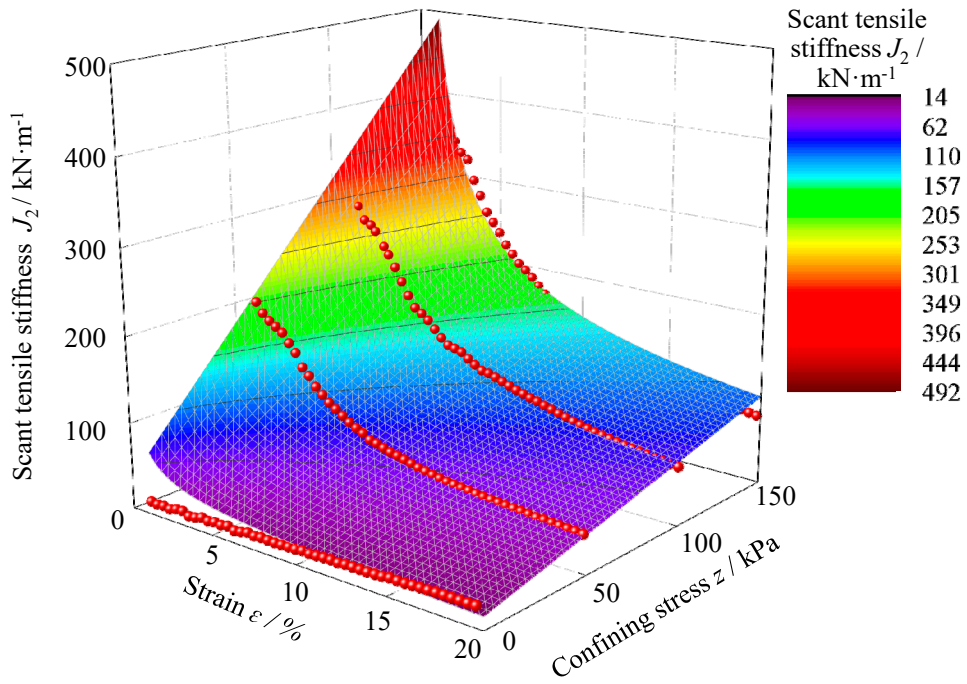


(b)

Fig. S8. Fitting results of secant tensile stiffness of nonwoven #1 under confinement: (a) with friction; (b) without friction

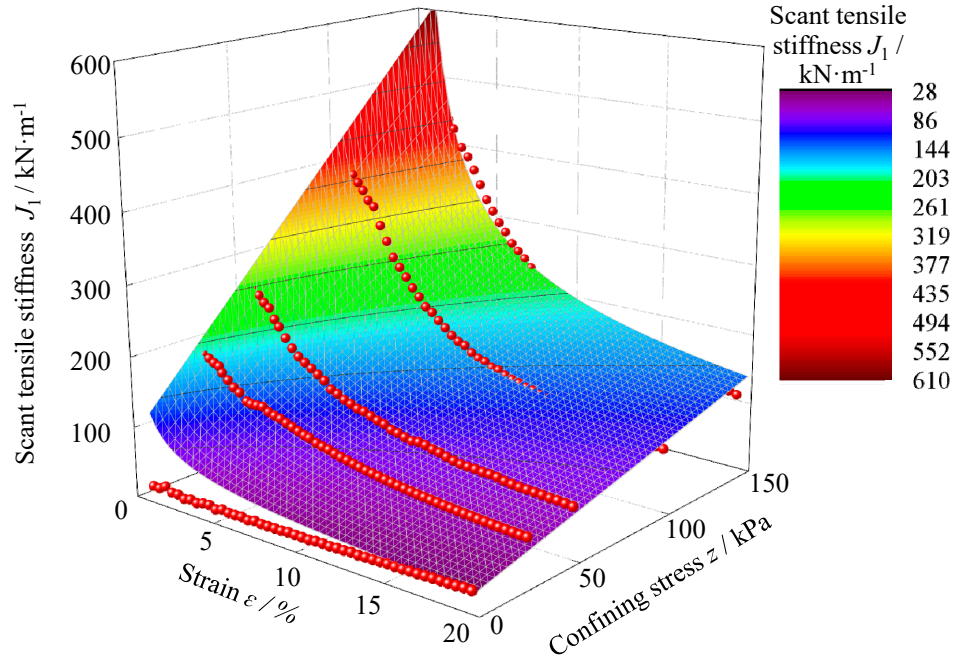


(a)

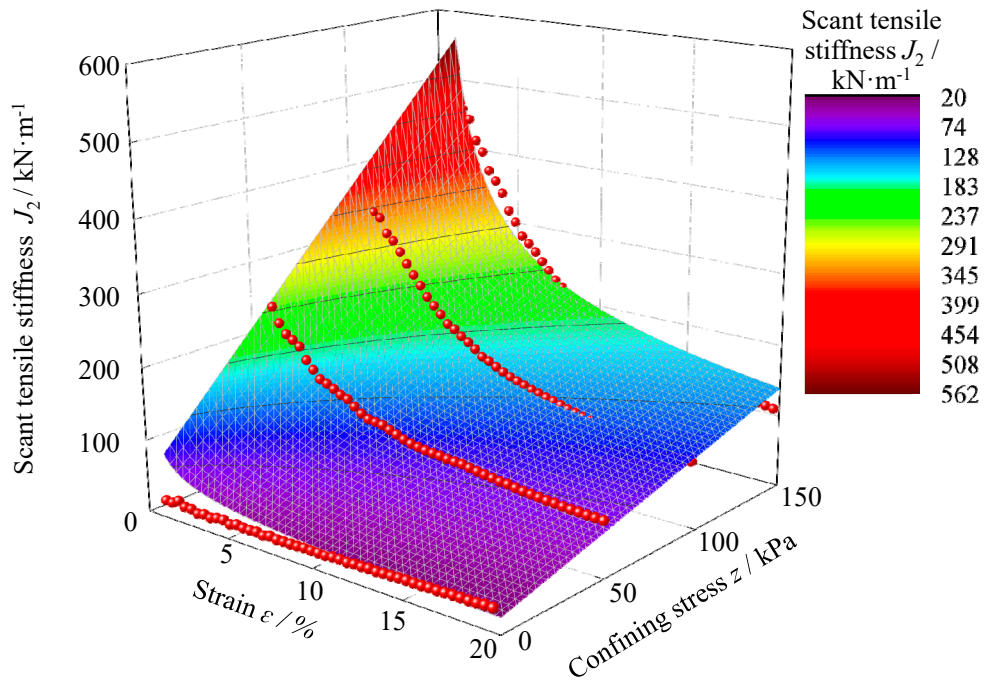


(b)

Fig. S9. Fitting results of secant tensile stiffness of nonwoven #2 under confinement: (a) with friction; (b) without friction



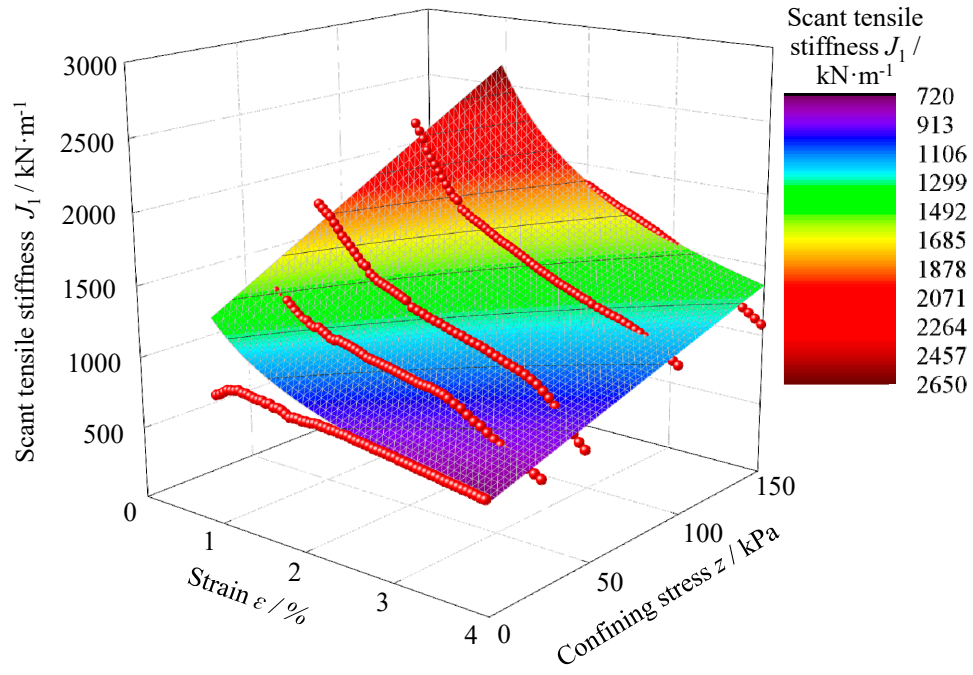
(a)



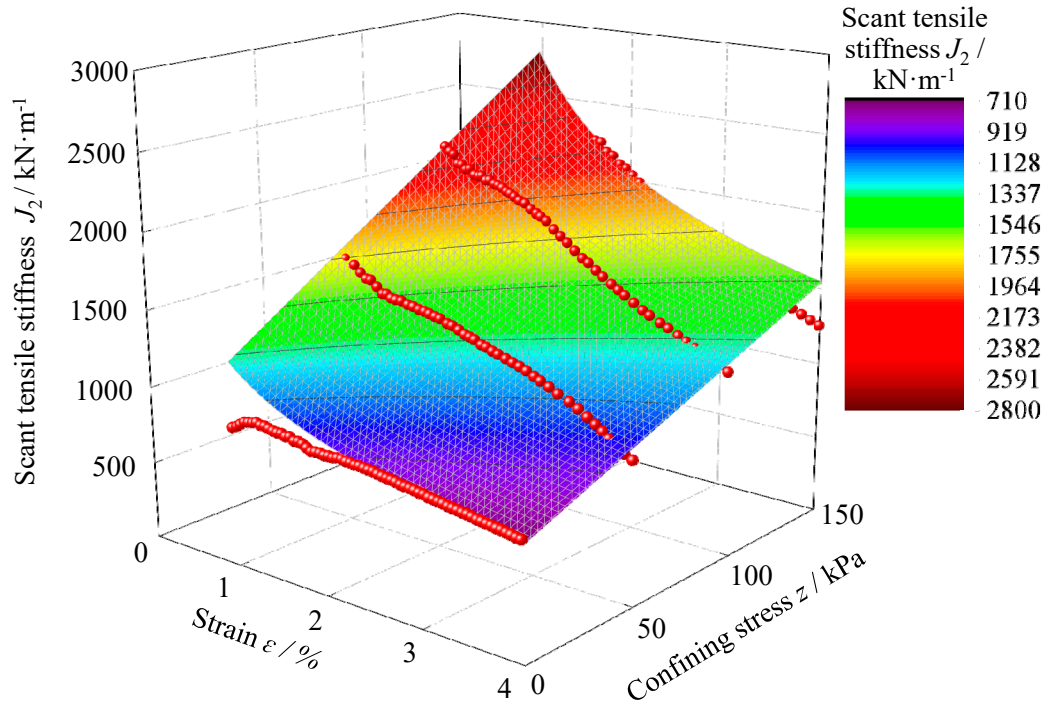
(b)

Fig. S10. Fitting results of secant tensile stiffness of nonwoven #3 under confinement: (a) with friction;

(b) without friction

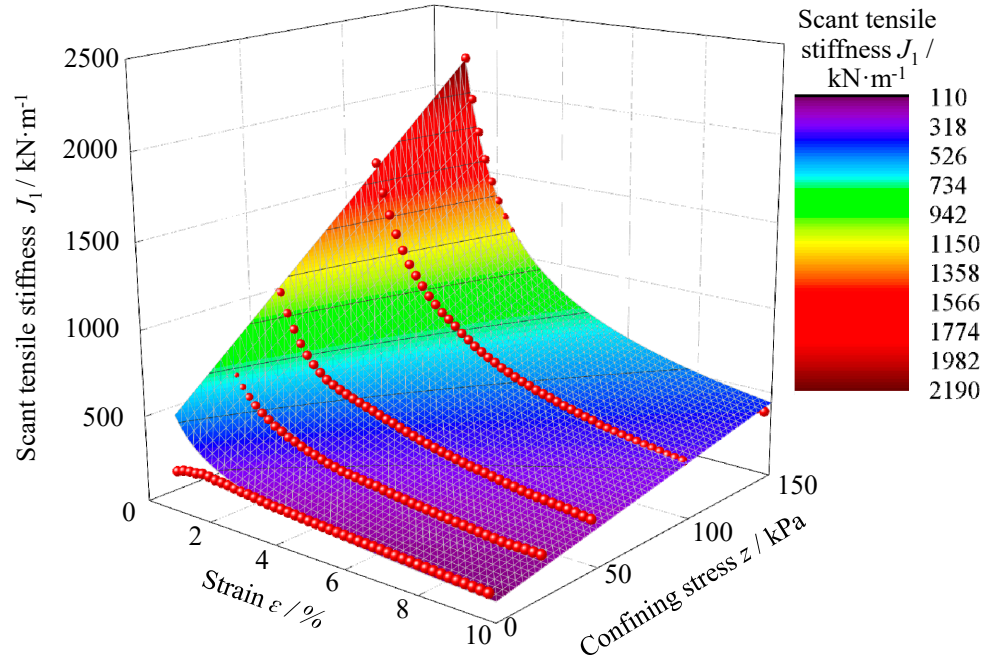


(a)

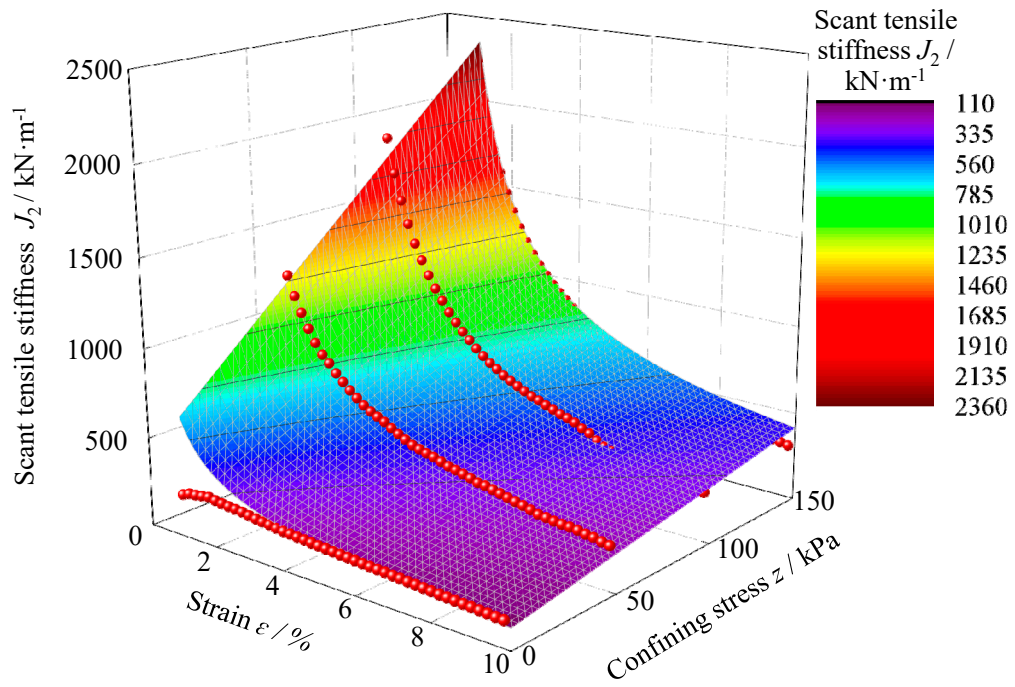


(b)

Fig. S11. Fitting results of secant tensile stiffness of glass fiber geogrid under confinement: (a) with friction; (b) without friction



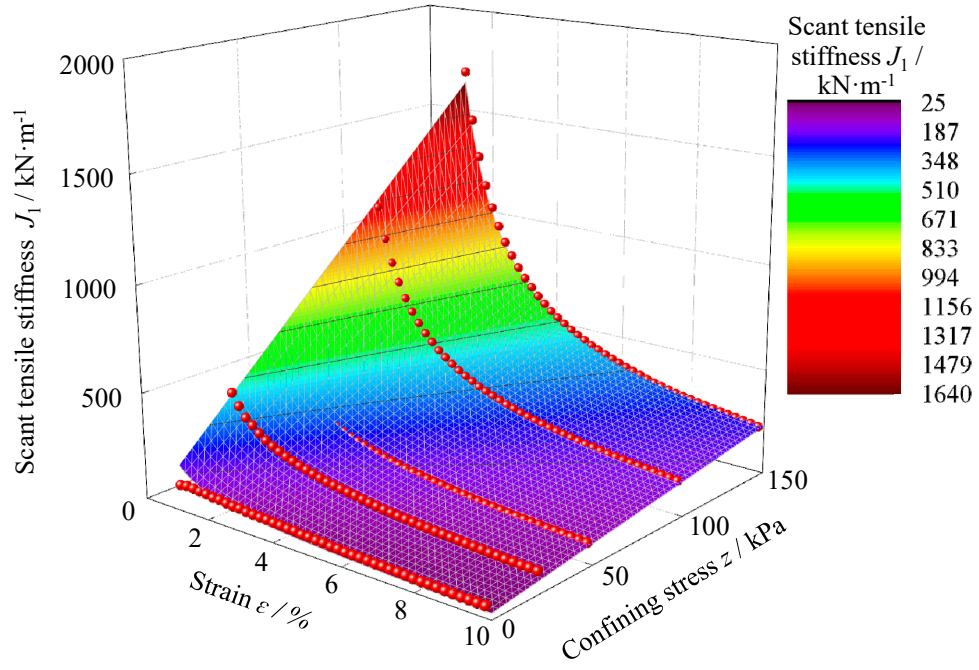
(a)



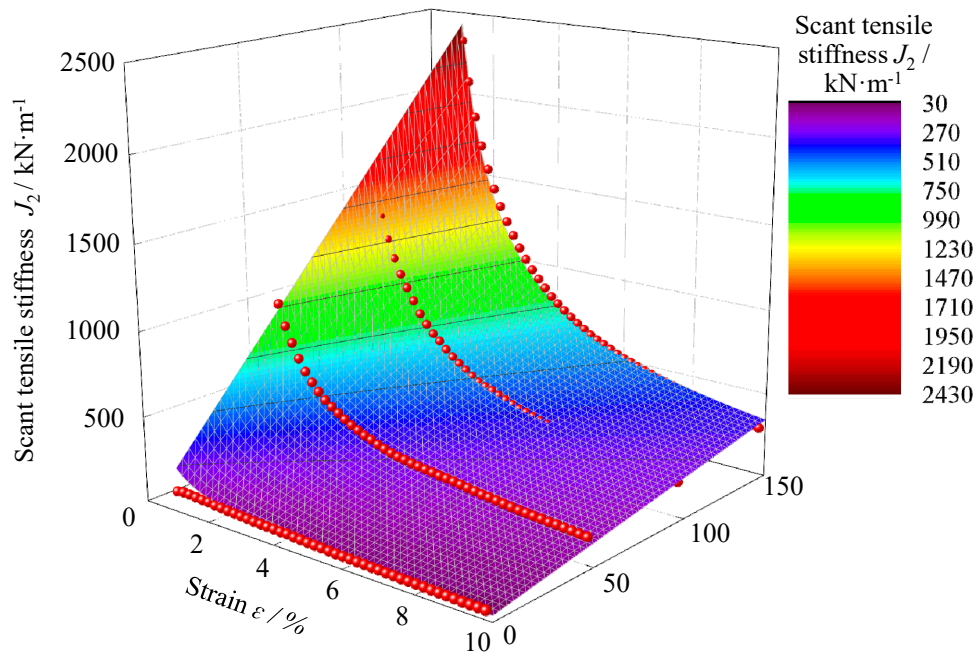
(b)

Fig. S12. Fitting results of secant tensile stiffness of plastic geogrid under confinement: (a) with friction;

(b) without friction



(a)



(b)

Fig. S13. Fitting results of secant tensile stiffness of geomembrane under confinement: (a) with friction;
(b) without friction

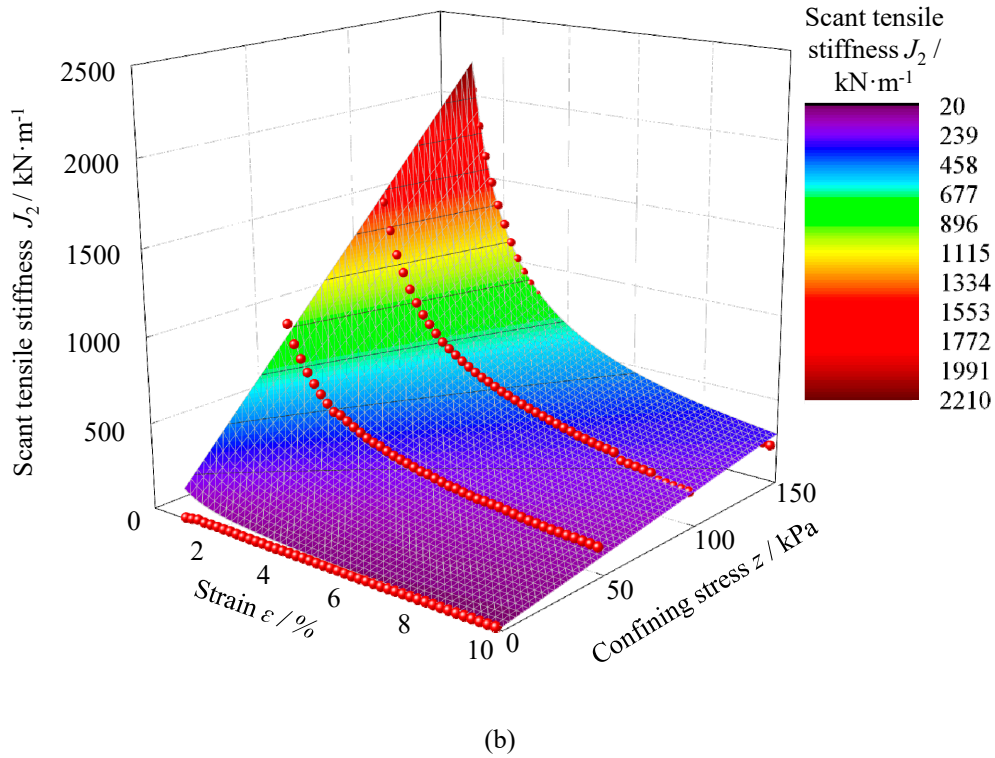
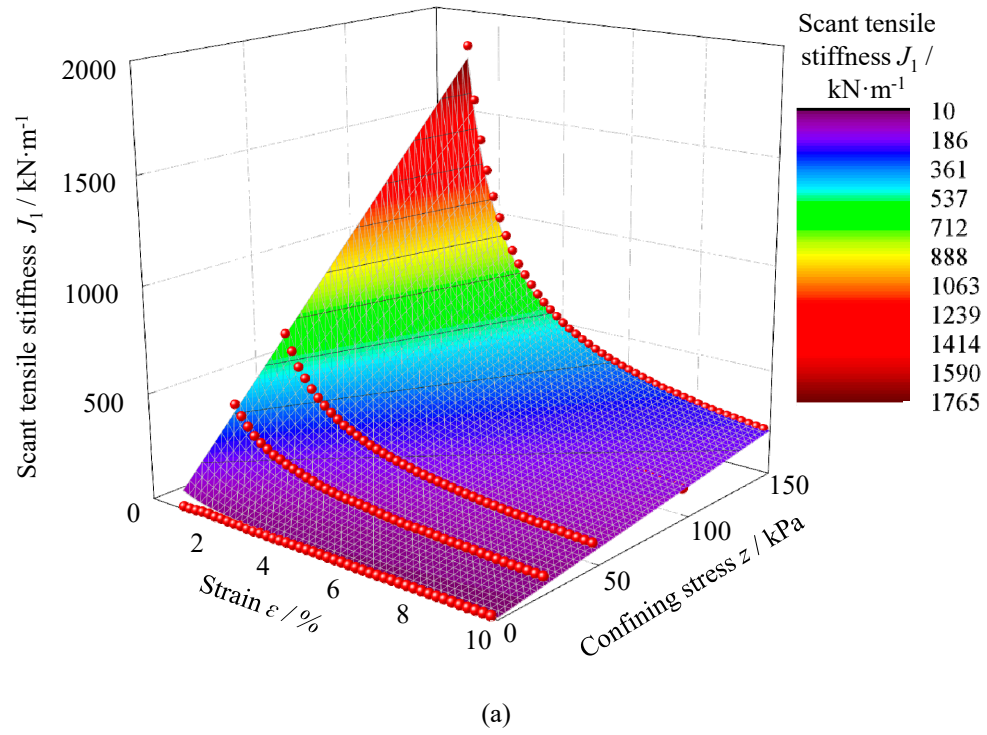
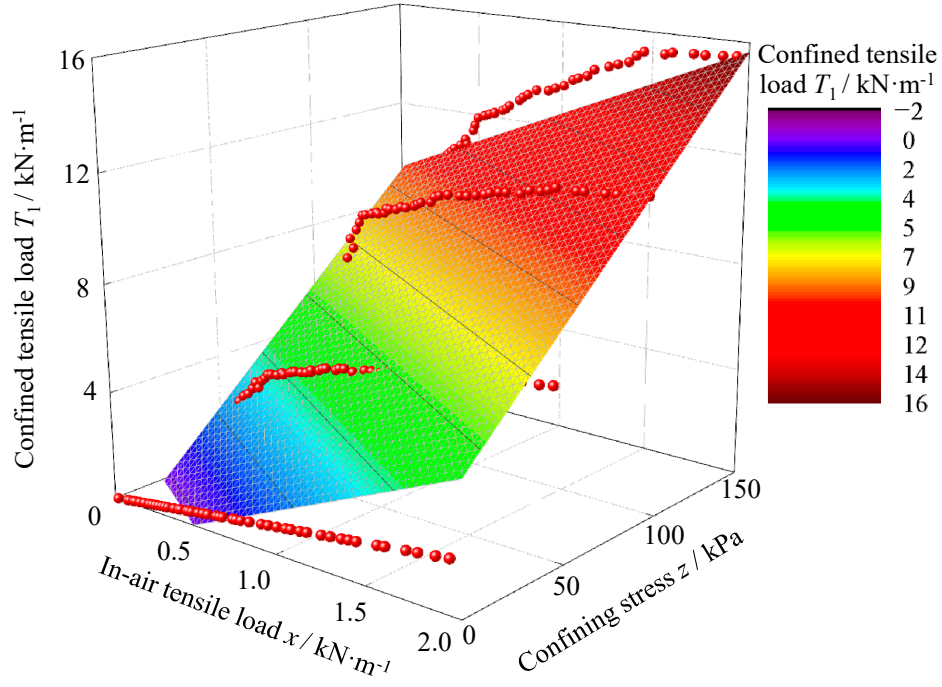
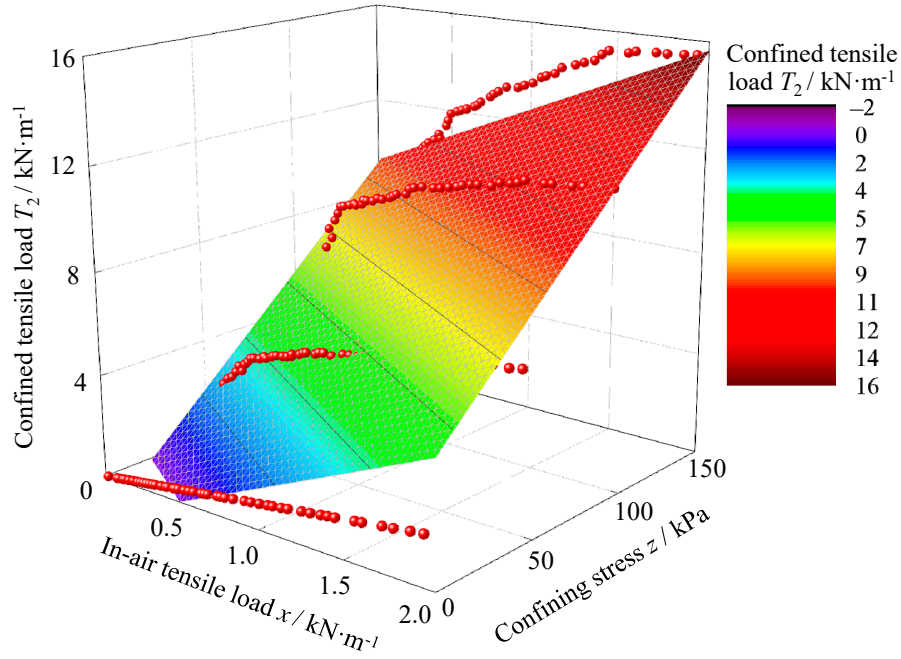


Fig. S14. Fitting results of secant tensile stiffness of geonet under confinement: (a) with friction; (b) without friction

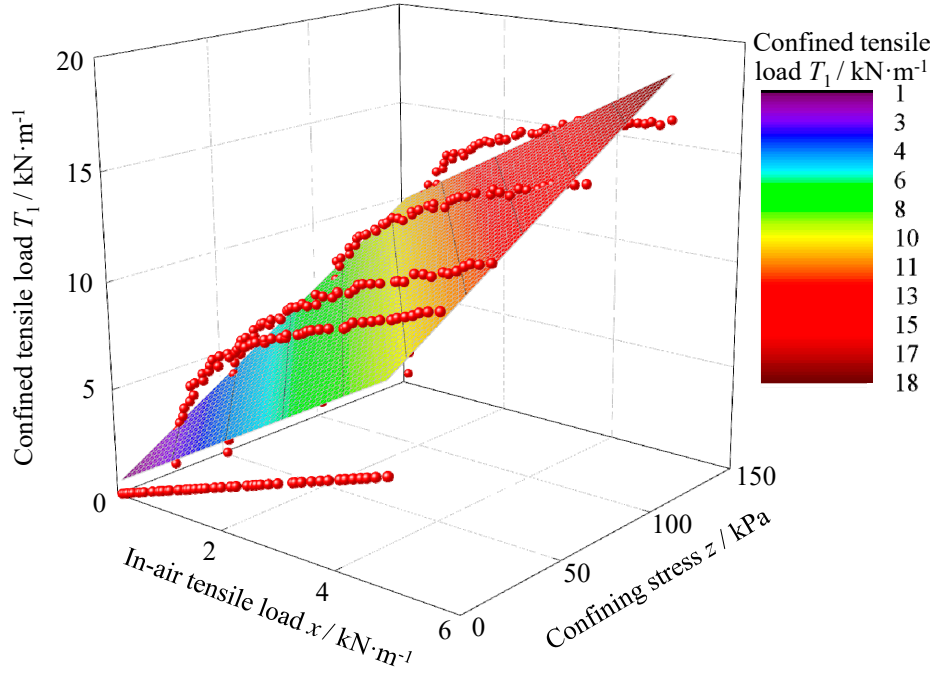


(a)

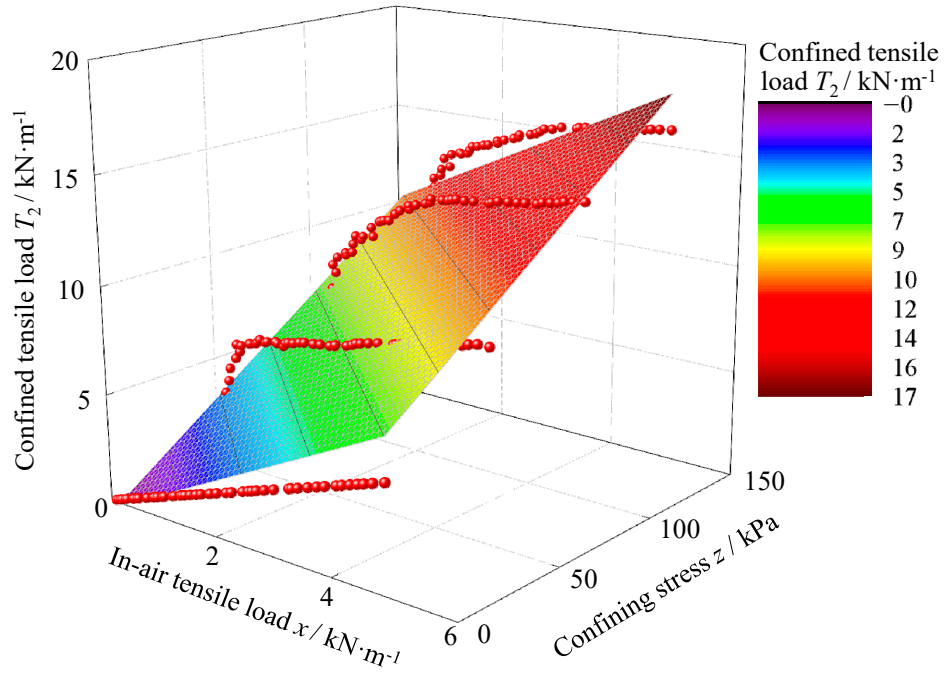


(b)

Fig. S15. Fitting results of confined tensile load of nonwoven #1: (a) with friction; (b) without friction

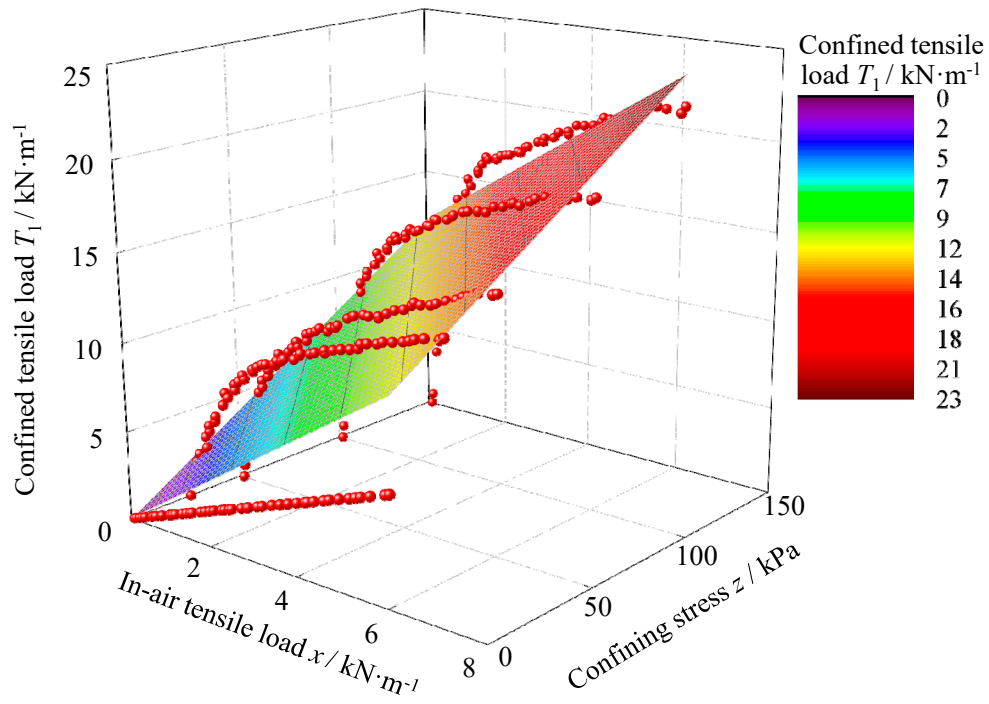


(a)

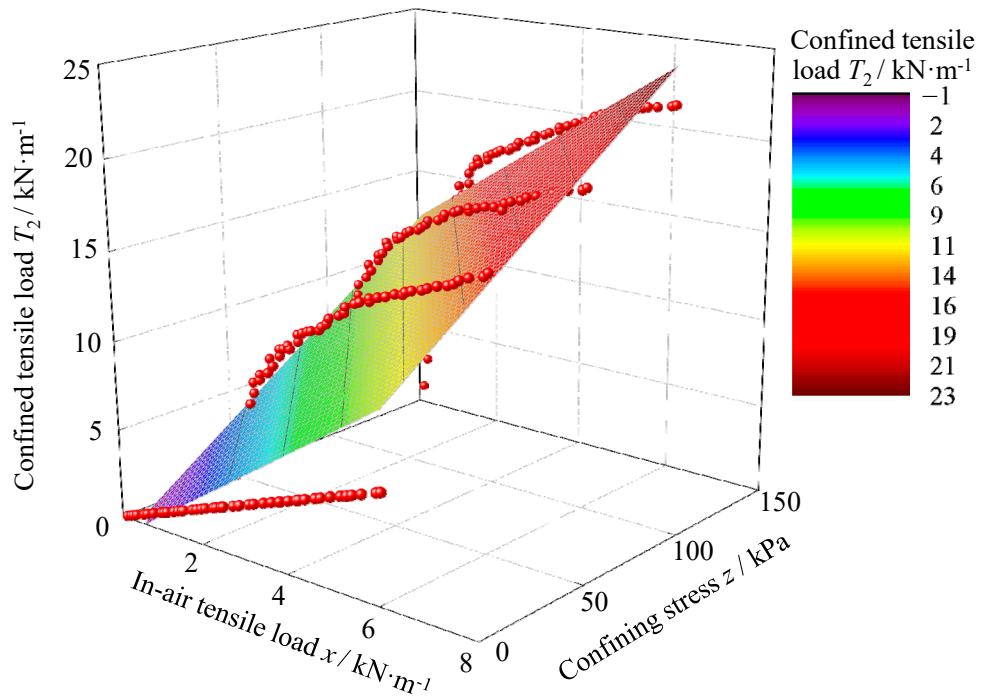


(b)

Fig. S16. Fitting results of confined tensile load of nonwoven #2: (a) with friction; (b) without friction

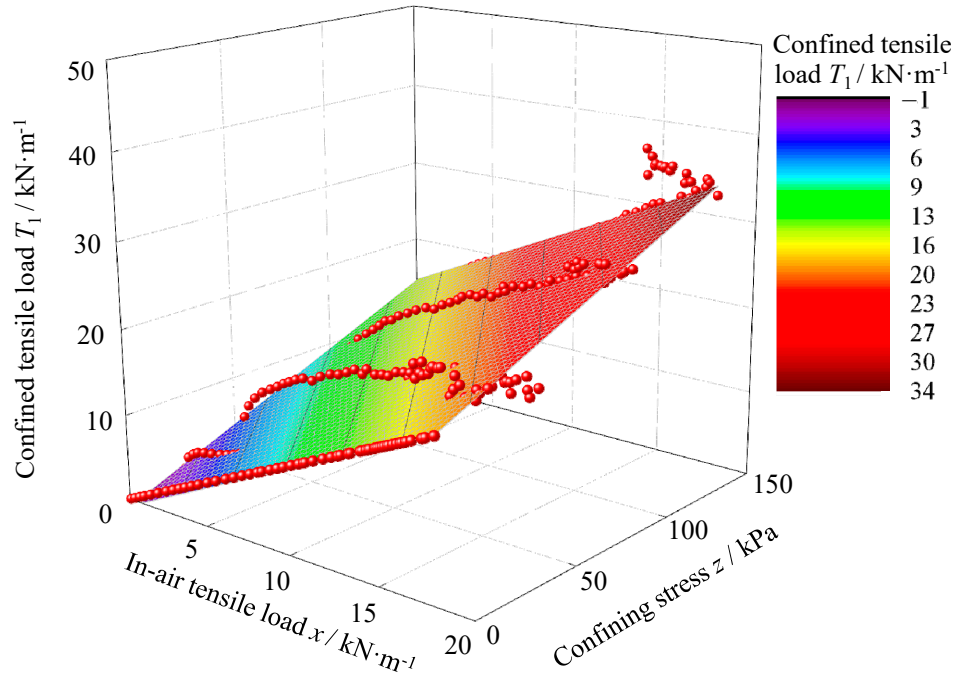


(a)

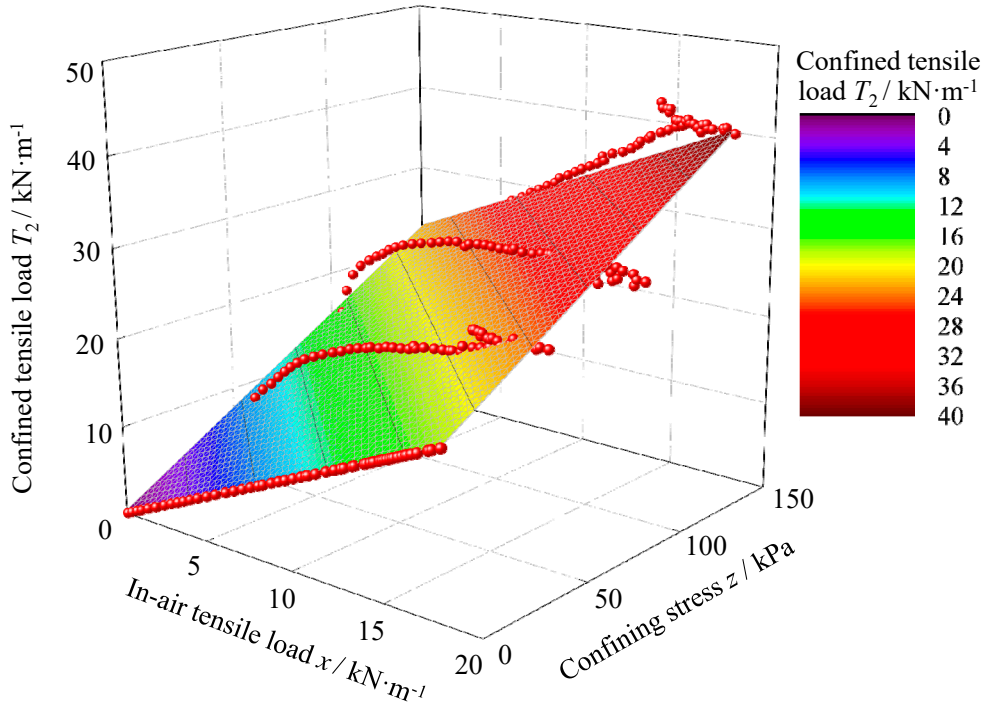


(b)

Fig. S17. Fitting results of confined tensile load of nonwoven #3: (a) with friction; (b) without friction



(a)



(b)

Fig. S18. Fitting results of confined tensile load of woven: (a) with friction; (b) without friction

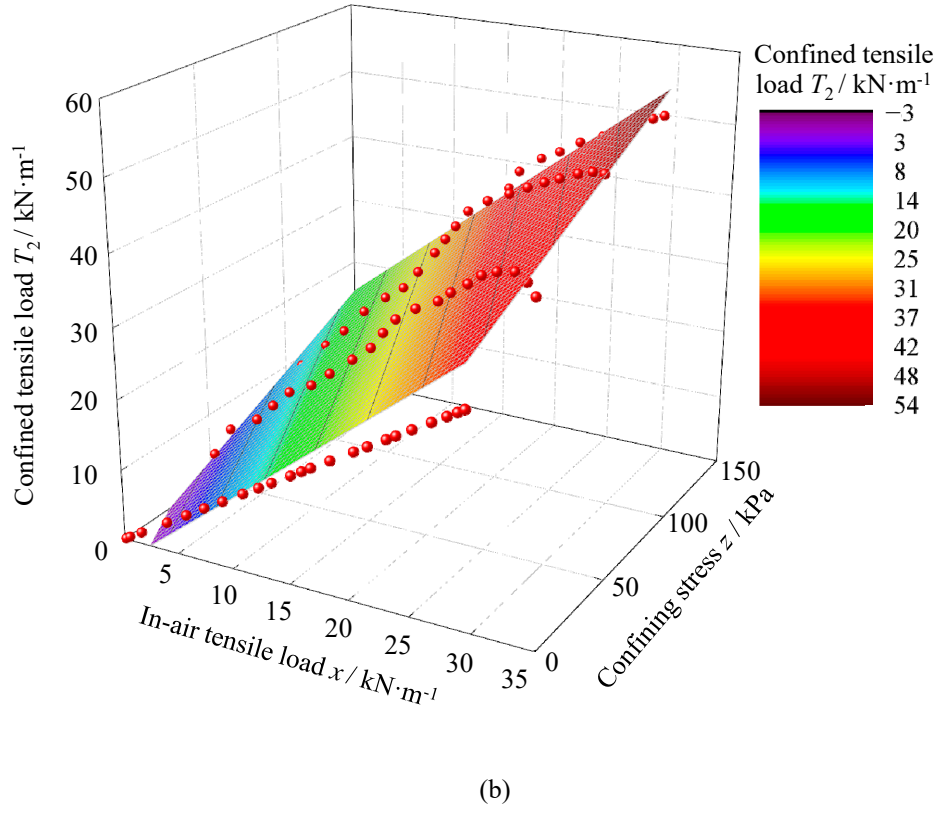
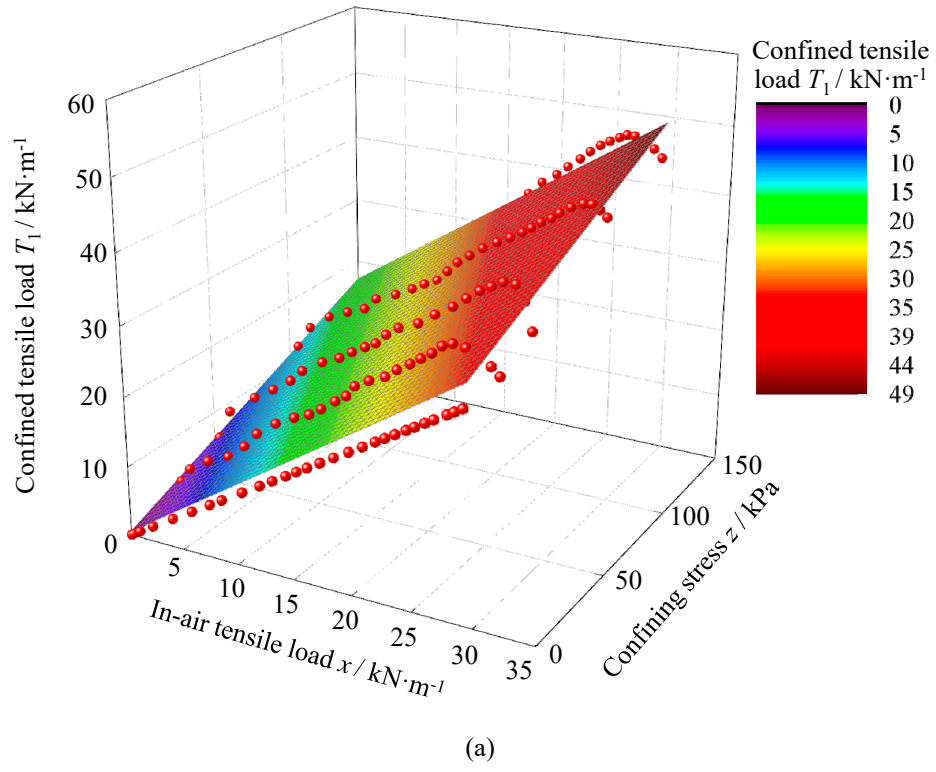
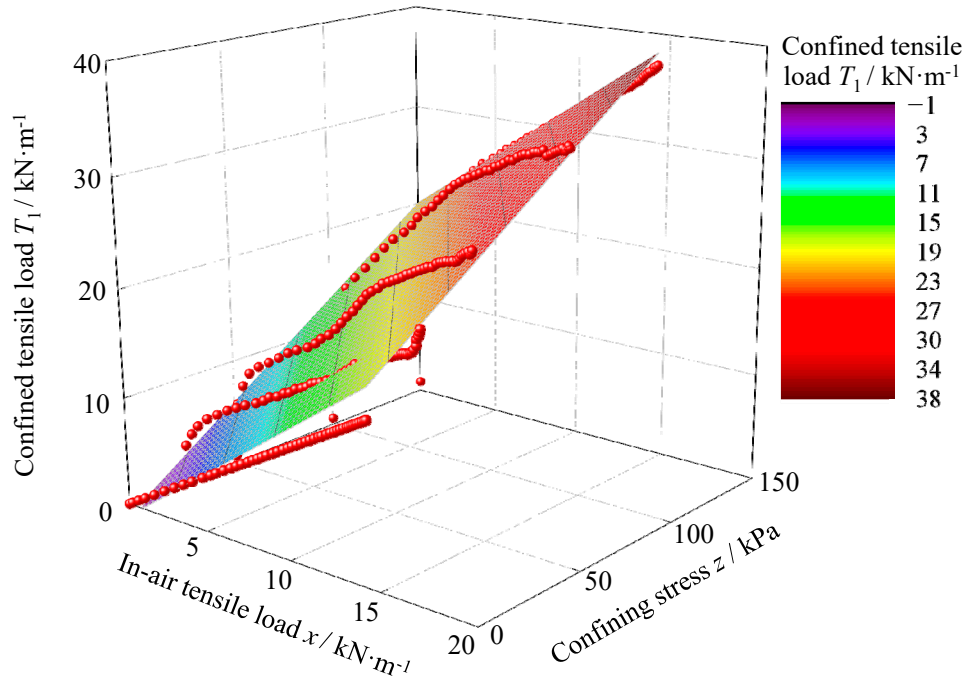
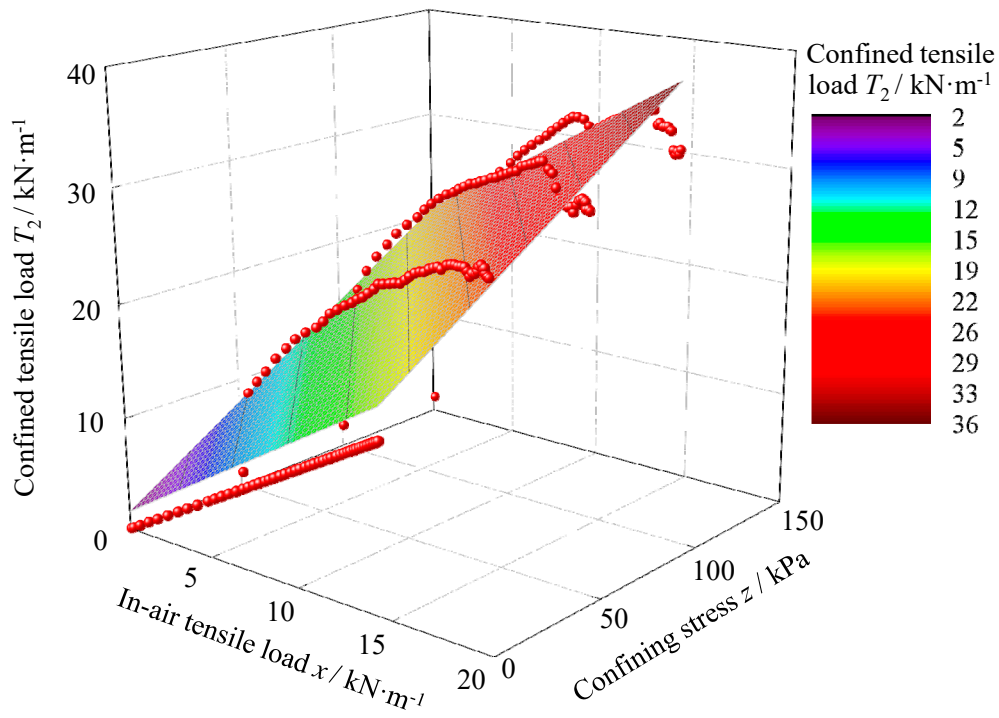


Fig. S19. Fitting results of confined tensile load of glass fiber geogrid: (a) with friction; (b) without friction



(a)



(b)

Fig. S20. Fitting results of confined tensile load of plastic geogrid: (a) with friction; (b) without friction

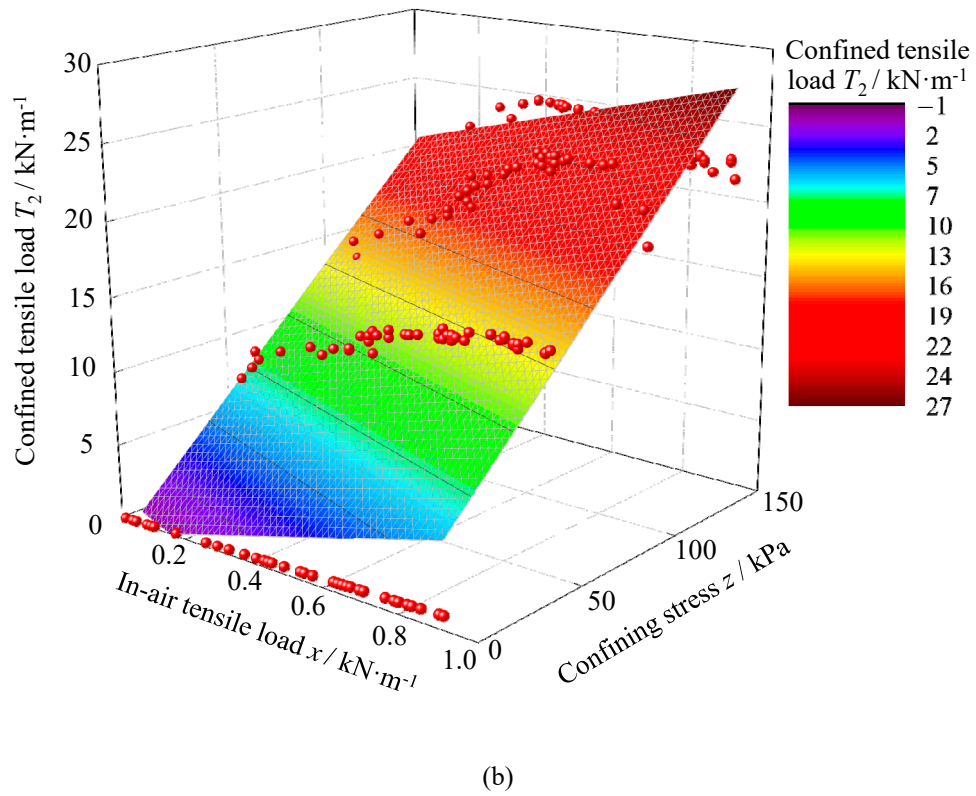
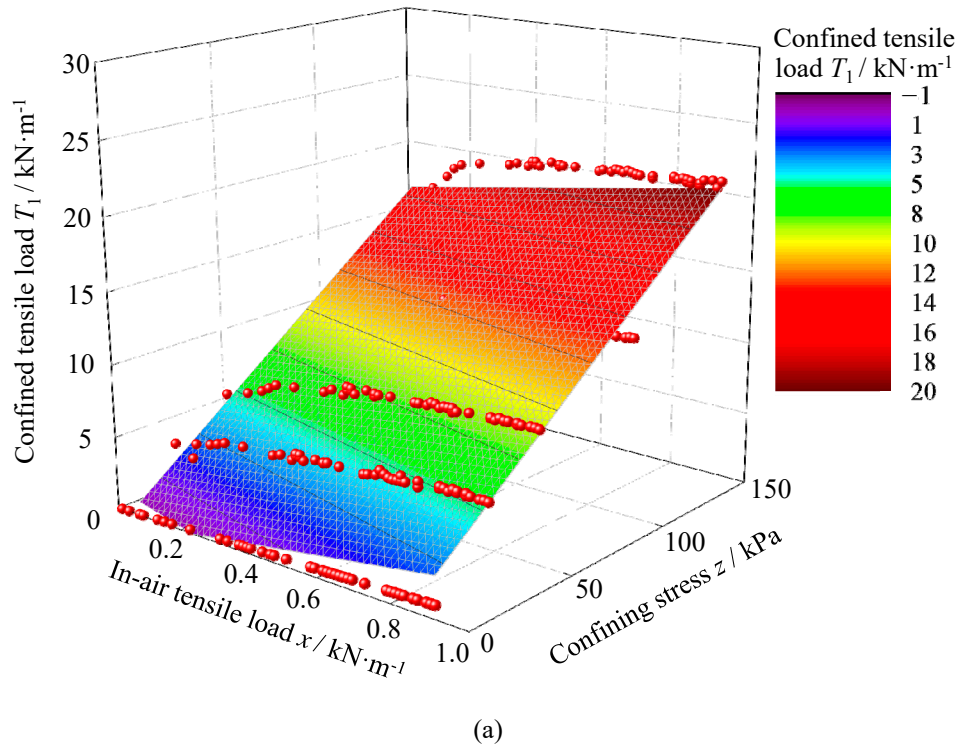


Fig. S21. Fitting results of confined tensile load of geonet: (a) with friction; (b) without friction