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**ANNEX E**

*Push-off Test Data*

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Specimen N1-P-S-1 (Plain NSC)



Figure E.1. Modes of Failure. Both sides of the same specimen.

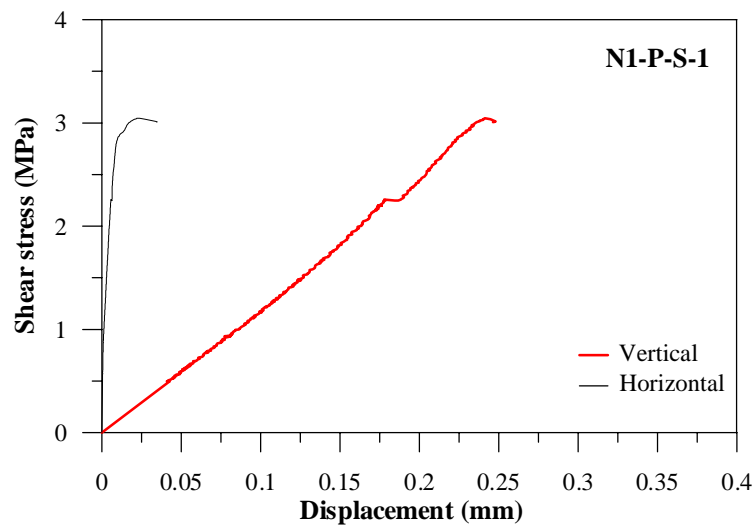


Figure E.2. Stress-displacement responses

Specimen N1-P-S-2 (Plain NSC)

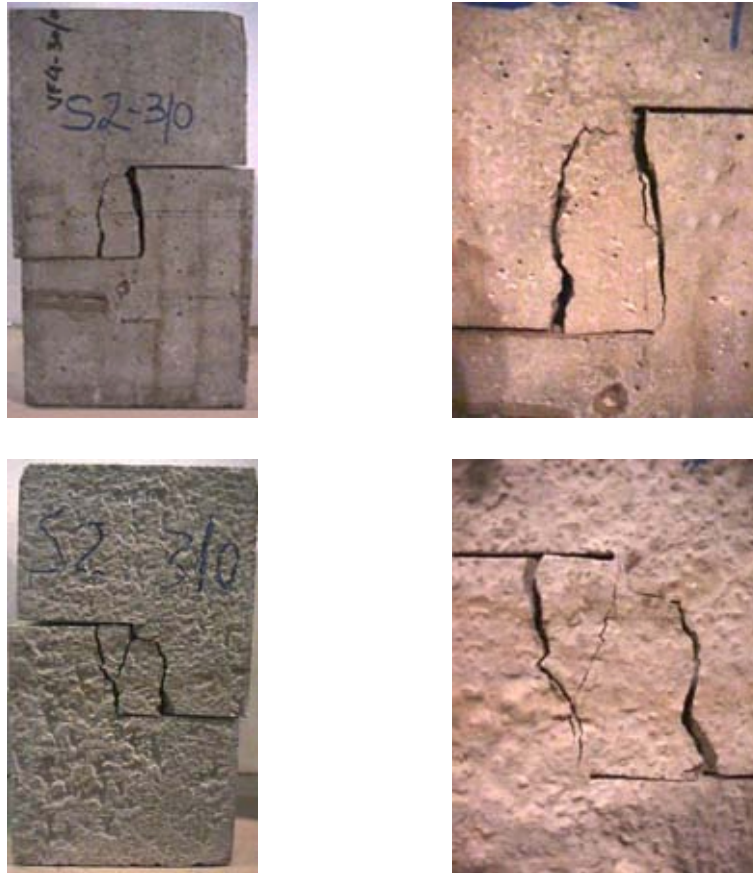


Figure E.3. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

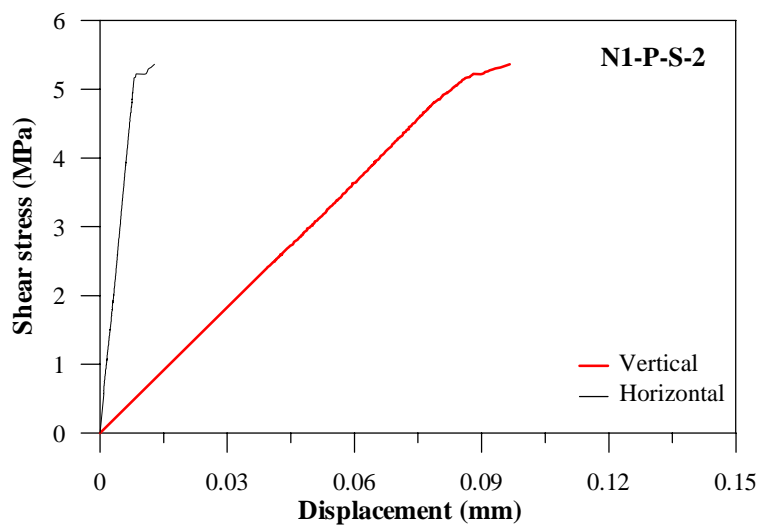


Figure E.4. Stress-displacement responses

Specimen N1-P-S-3 (Plain NSC)



Figure E.5. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

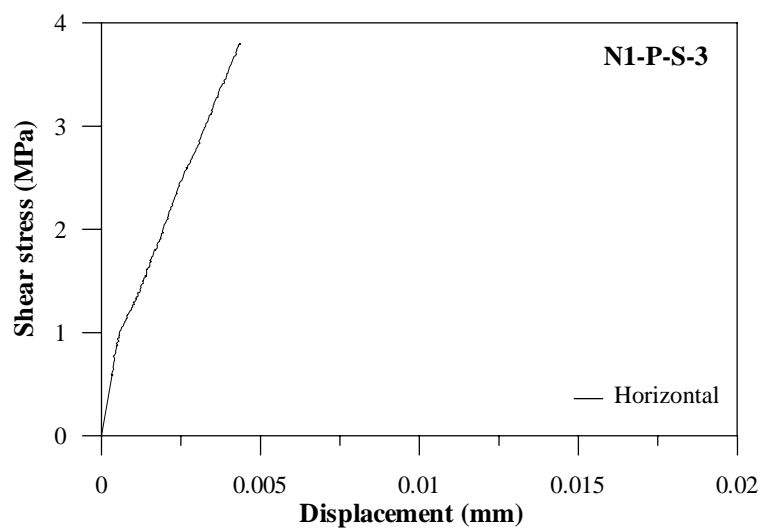


Figure E.6. Stress-displacement responses

Specimen N1-20-S-1 (NSC, 20 kg/m<sup>3</sup> of steel fibers)



Figure E.7. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

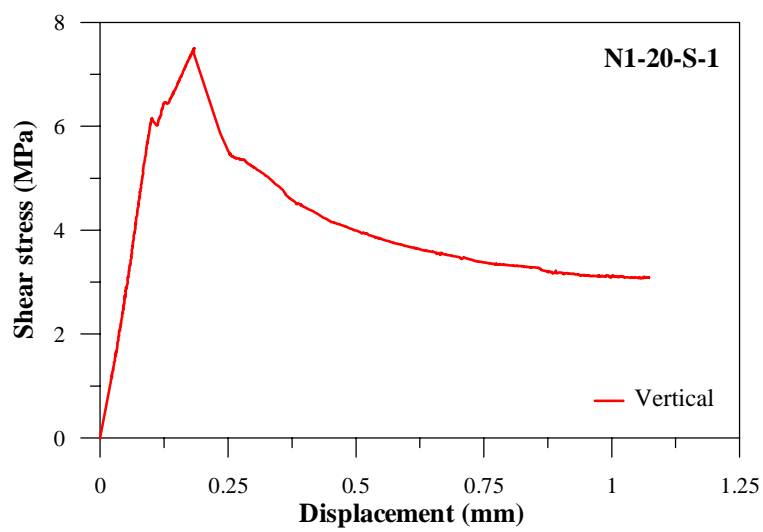
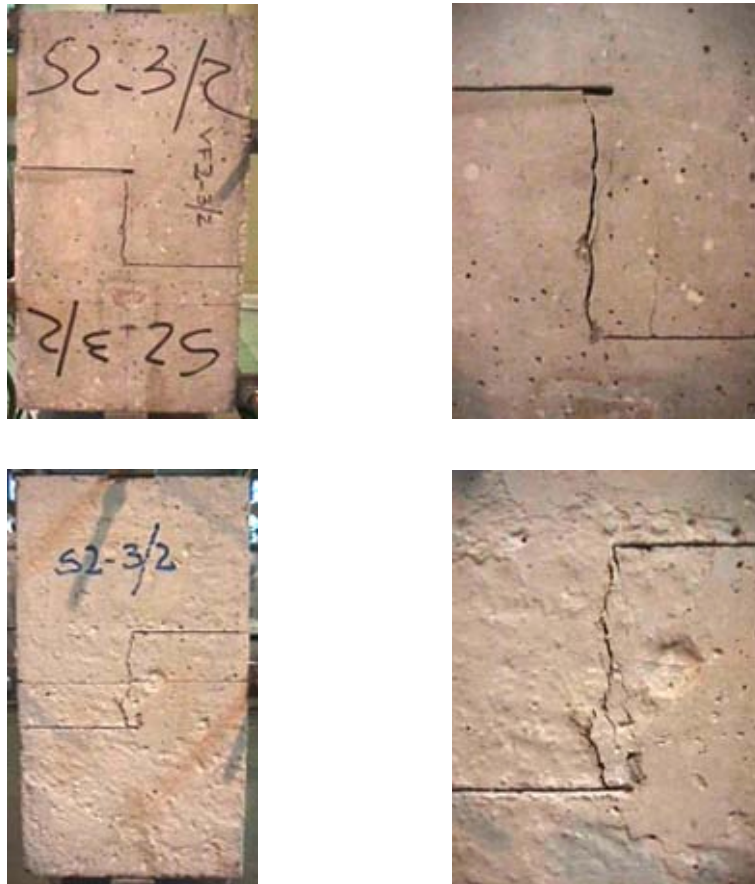
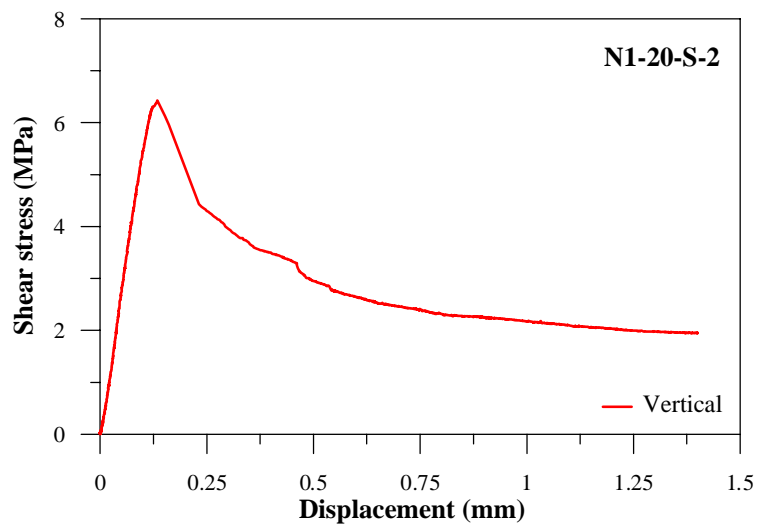


Figure E.8. Stress-displacement responses

Specimen N1-20-S-2 (NSC, 20 kg/m<sup>3</sup> of steel fibers)



**Figure E.9.** Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)



**Figure E.10.** Stress-displacement responses

Specimen N1-20-S-3 (NSC, 20 kg/m<sup>3</sup> of steel fibers)



Figure E.11. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

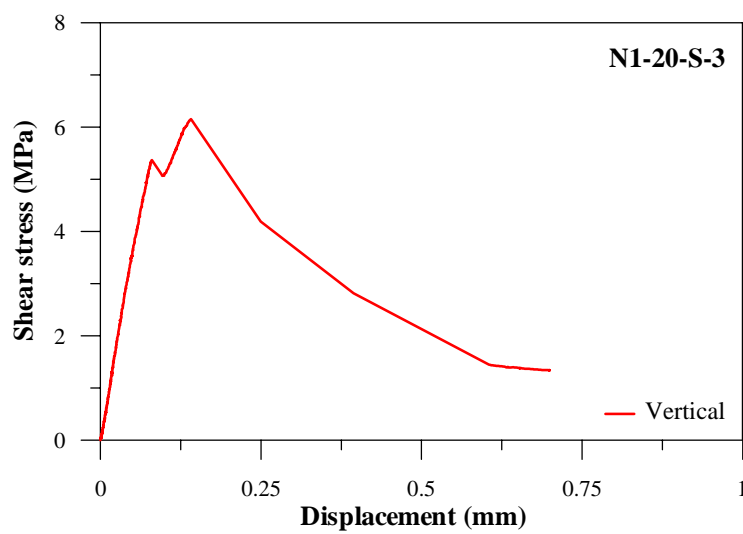


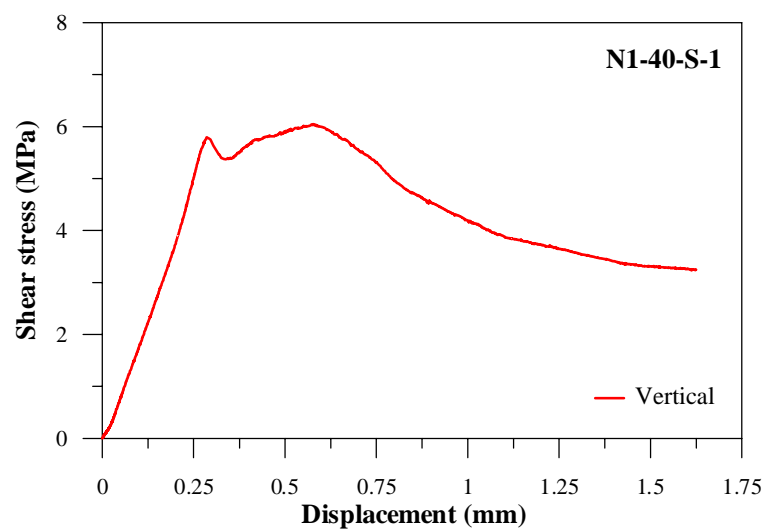
Figure E.12. Stress-displacement responses



Specimen N1-40-S-1 (NSC, 40 kg/m<sup>3</sup> of steel fibers)



**Figure E.13.** Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)



**Figure E.14.** Stress-displacement responses



Specimen N1-40-S-2 (NSC, 40 kg/m<sup>3</sup> of steel fibers)



Figure E.15. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

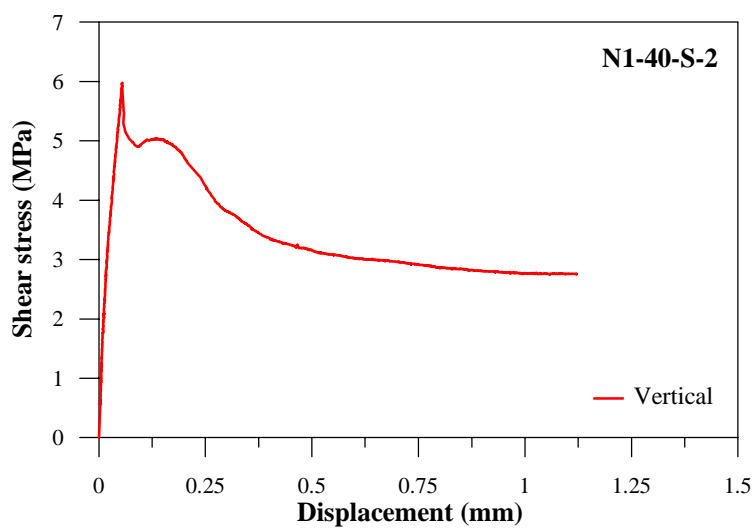
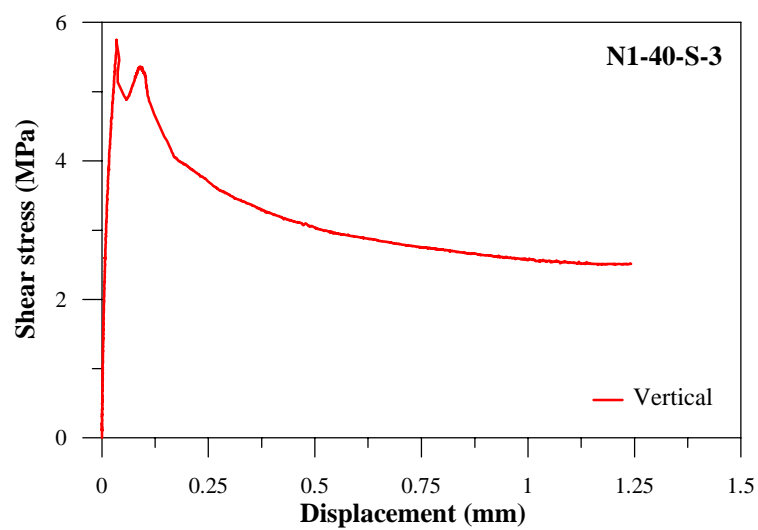


Figure E.16. Stress-displacement responses

Specimen N1-40-S-3 (NSC, 40 kg/m<sup>3</sup> of steel fibers)



**Figure E.17.** Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)



**Figure E.18.** Stress-displacement responses

Specimen N2-P-S-1 (Plain HSC)

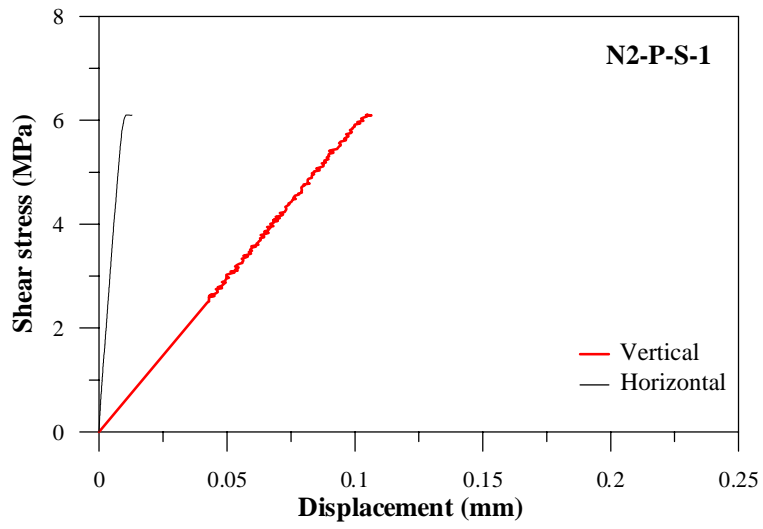
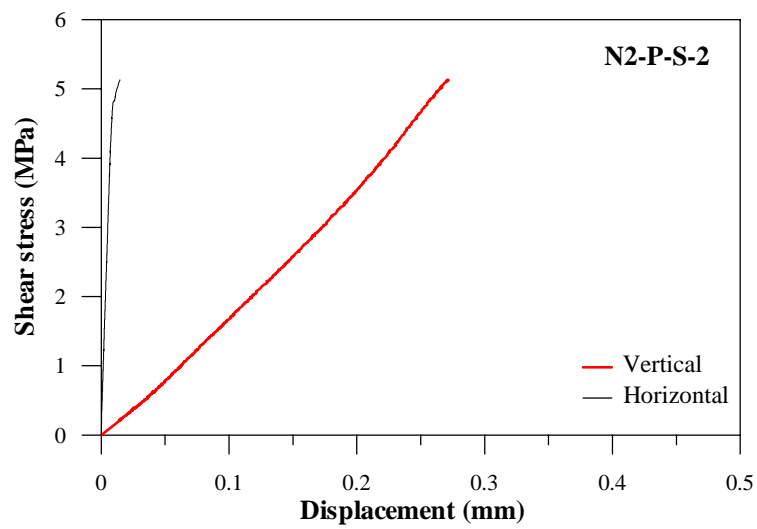


Figure E.19. Stress-displacement responses

**Specimen N2-P-S-2 (Plain HSC)**



**Figure E.20.** Modes of Failure. Both sides of the same specimen.



**Figure E.21.** Stress-displacement responses

Specimen N2-P-S-3 (Plain HSC)



Figure E.22. Modes of failure. Both sides of the same specimen.

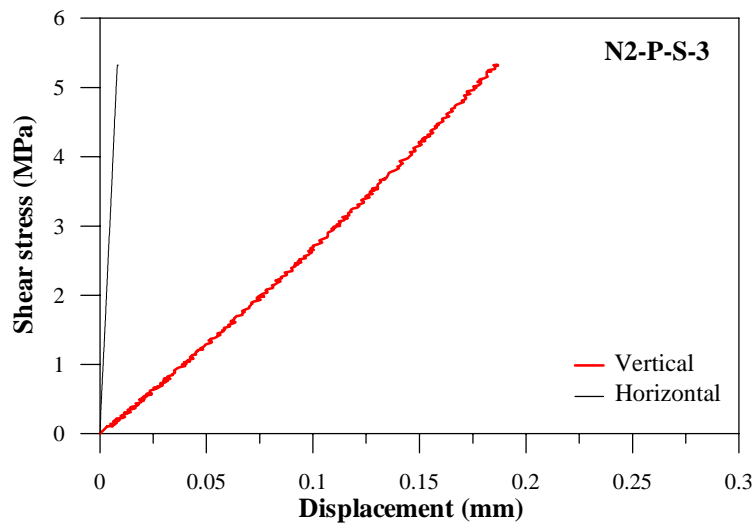
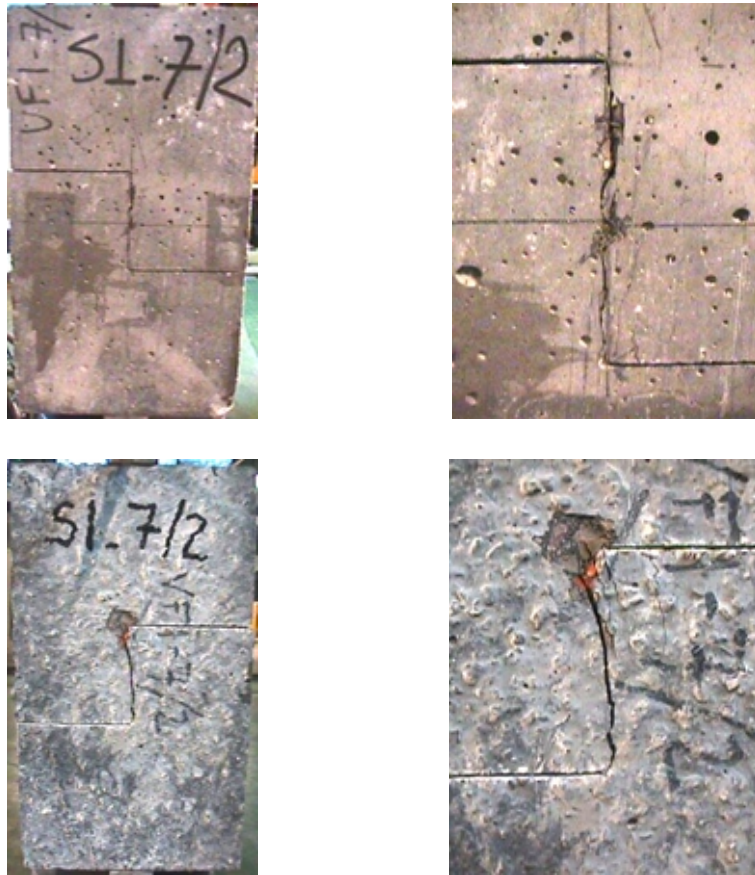
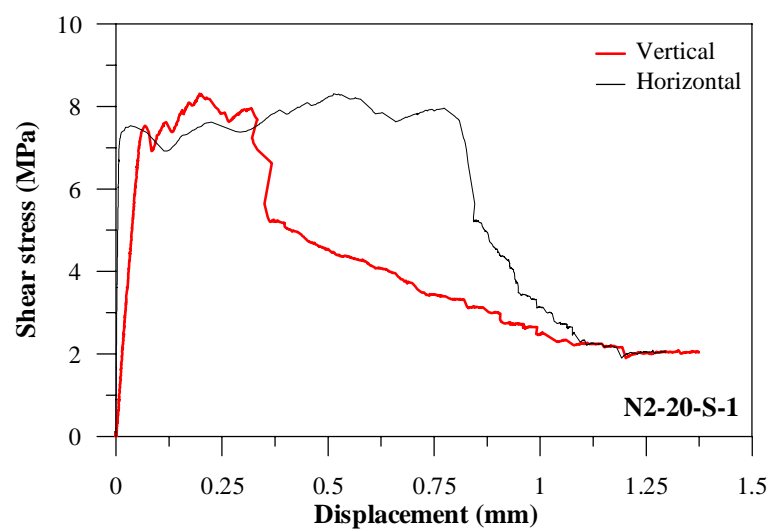


Figure E.23. Stress-displacement responses

Specimen N2-20-S-1 (HSC, 20 kg/m<sup>3</sup> of steel fibers)



**Figure E.24.** Modes of failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)



**Figure E.25.** Stress-displacement responses

Specimen N2-20-S-2 (HSC, 20 kg/m<sup>3</sup> of steel fibers)



Figure E.26. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

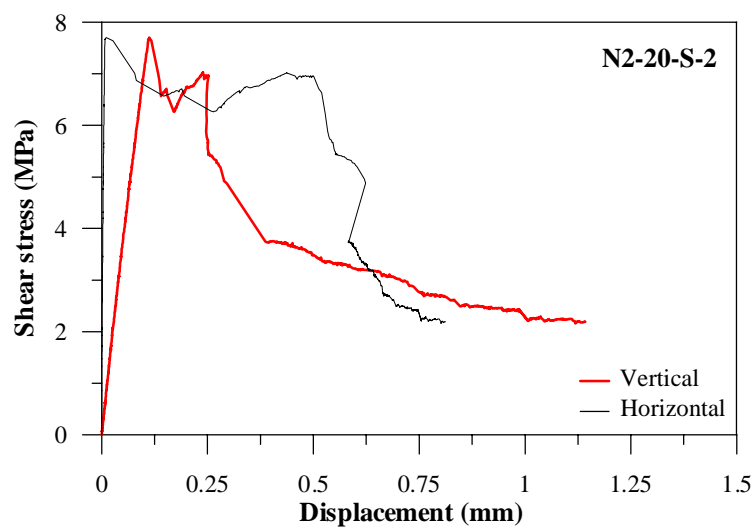


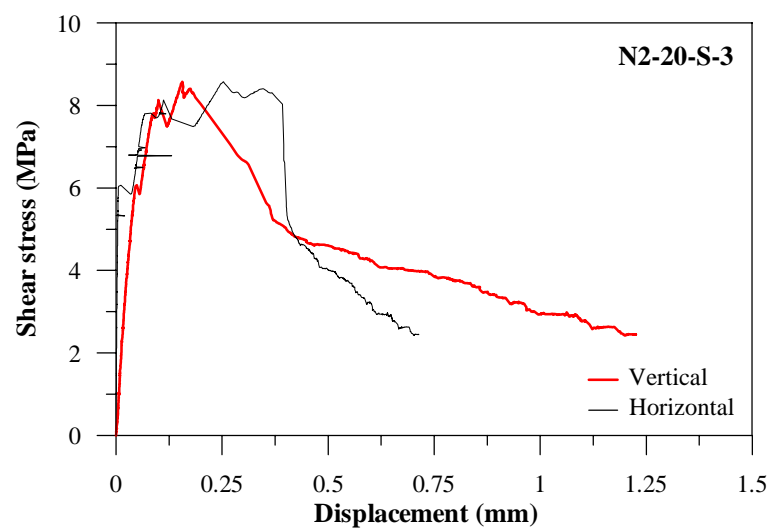
Figure E.27. Stress-displacement responses



Specimen N2-20-S-3 (HSC, 20 kg/m<sup>3</sup> of steel fibers)



**Figure E.28.** Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)



**Figure E.29.** Stress-displacement responses

Specimen N2-40-S-1 (HSC, 40 kg/m<sup>3</sup> of steel fibers)



Figure E.30. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

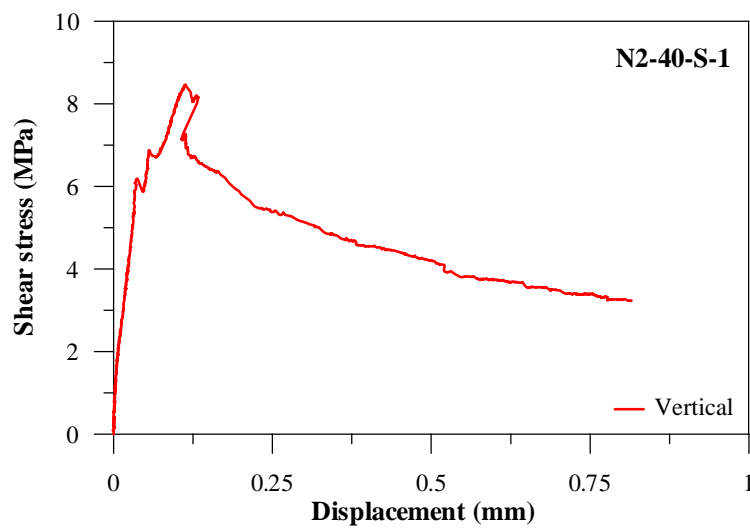


Figure E.31. Stress-displacement responses

Specimen N2-40-S-2 (HSC, 40 kg/m<sup>3</sup> of steel fibers)

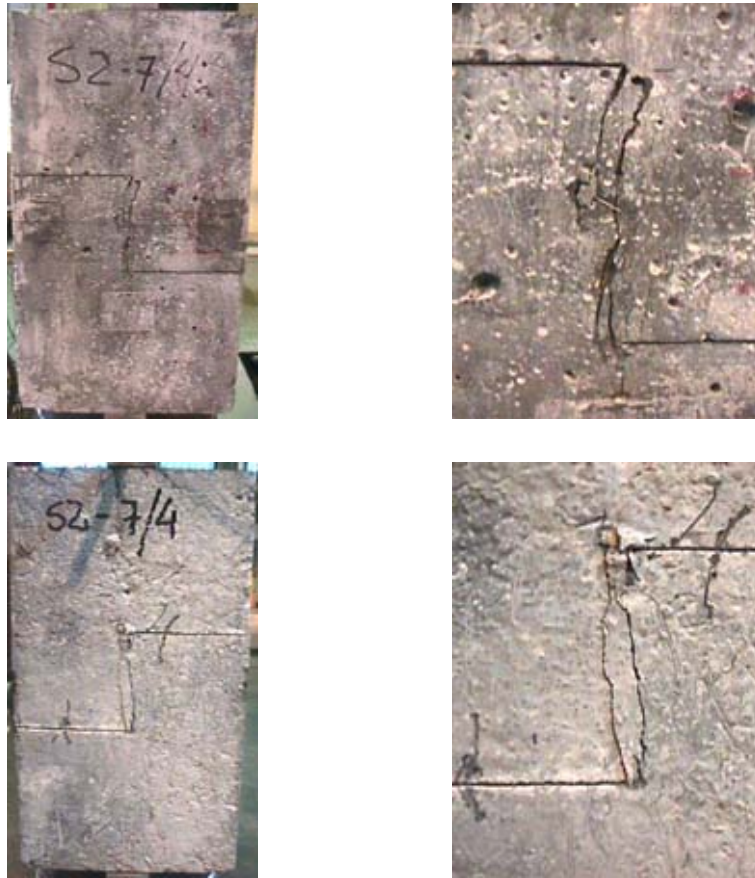


Figure E.32. Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)

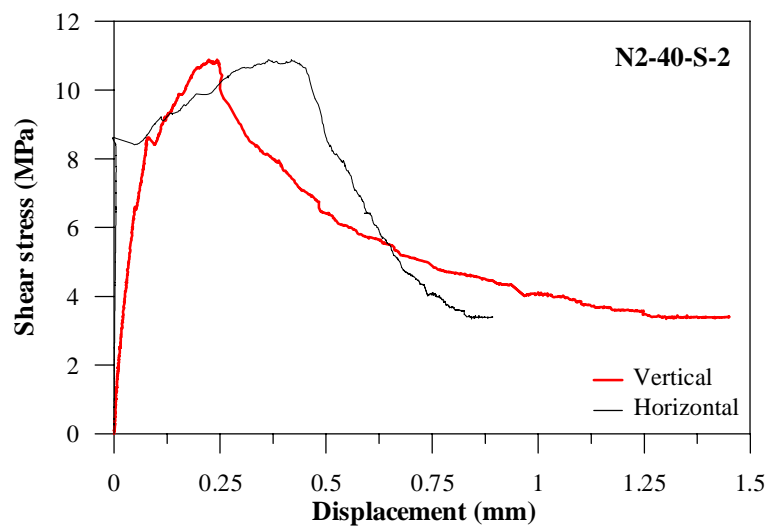
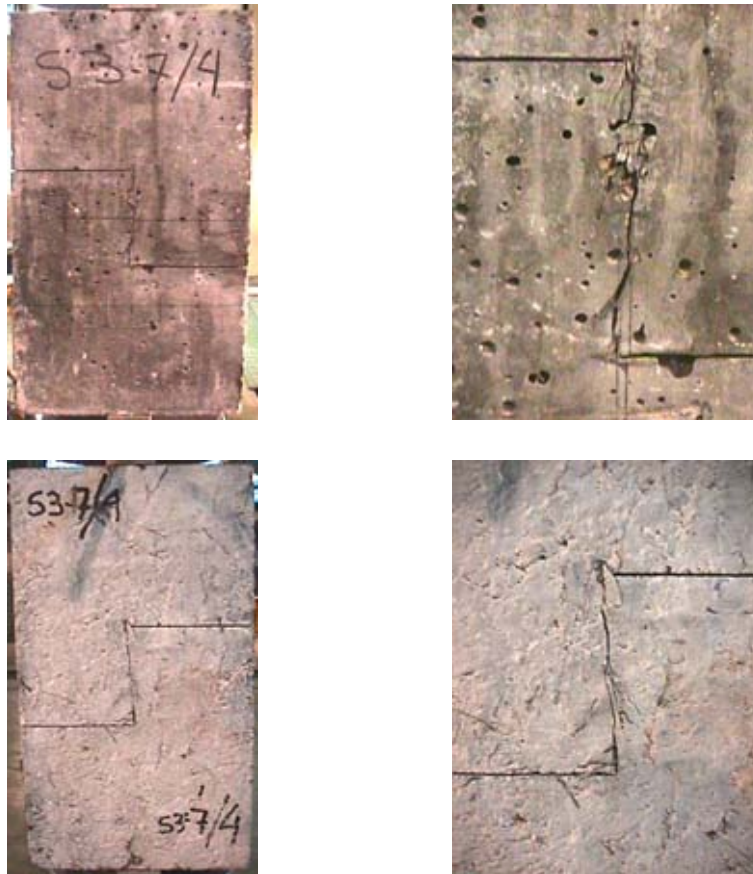
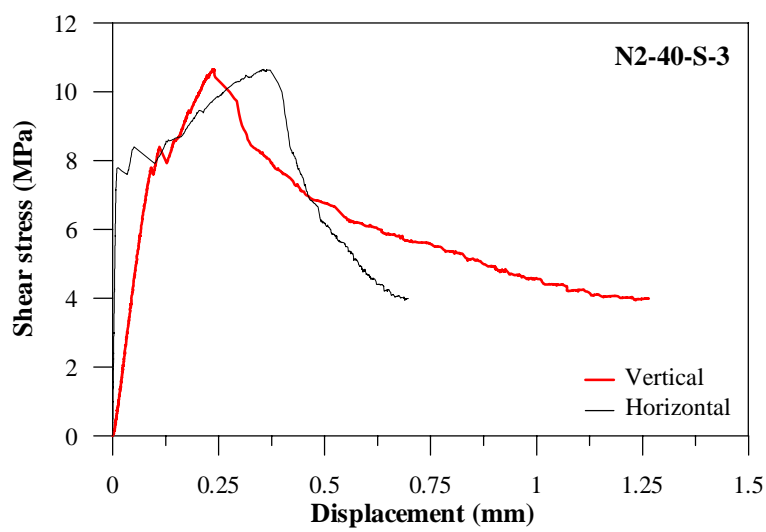


Figure E.33. Stress-displacement responses

Specimen N2-40-S-3 (HSC, 40 kg/m<sup>3</sup> of steel fibers)



**Figure E.34.** Modes of Failure. Both sides of the same specimen (whole specimen on the right, failure zone on the left)



**Figure E.35.** Stress-displacement responses