



## **APPENDIX**

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## NOMENCLATURE

$t_f$	flange thickness
$t_w$	web thickness
$d$	depth
$bf$	flange width
$\tau_{avg}$	average shear stress
$V$	shear load
$A$	surface area
$P_{cr}$	critical compression load
$E$	Young's Modulus
$I$	moment of inertia
$L$	length