

# DIN EN 1147:2010-10 (E)

## Portable ladders for fire service use

---

<b>Contents</b>		<b>Page</b>
Foreword .....		4
Introduction .....		5
1	Scope .....	6
2	Normative references .....	6
3	Terms and definitions .....	6
4	Categorization .....	8
5	Dimensions and total masses .....	9
5.1	Length .....	9
5.2	Width between stiles .....	9
5.3	Mass .....	9
6	Rungs .....	9
7	Extending ladder requirements .....	11
7.1	Force .....	11
7.2	Lines .....	11
7.3	Cables .....	11
7.4	Additional safety requirements .....	11
7.5	Pawls .....	11
8	Fittings .....	11
8.1	Hooks .....	11
8.2	Feet .....	12
8.3	Wheels .....	12
9	Stabilizing means .....	12
10	Poles .....	12
11	Materials and finishes .....	12
12	Marking .....	13
13	Performance requirements .....	14
13.1	Deflection - All ladders .....	14
13.2	Deflection - Compulsory pole .....	15
13.3	Other tests .....	15
14	General test parameters .....	15
Annex A (normative)	Deflection test: applicable to all ladders not covered by Annex B except hook ladders (non-destructive) .....	17
Annex B (normative)	Deflection test: applicable to 3-person compulsory pole ladder (non-destructive) .....	20

<b>Annex C (normative) Rung torque test: all ladders (non-destructive)</b> .....	<b>23</b>
<b>Annex D (normative) Pole test (non-destructive)</b> .....	<b>24</b>
<b>Annex E (normative) Horizontal test: applicable to all ladders not covered by Annex F except hook ladders (destructive)</b> .....	<b>25</b>
<b>Annex F (normative) Horizontal test: applicable to 3-person compulsory pole ladder (destructive)</b> ..	<b>26</b>
<b>Annex G (normative) Pawl test: applicable to all extension ladders (destructive)</b> .....	<b>27</b>
<b>Annex H (normative) Rescue ladder rung test: applicable to all rescue ladders (destructive)</b> .....	<b>28</b>
<b>Annex I (normative) Access ladder rung test: applicable to all access ladders (destructive)</b> .....	<b>29</b>
<b>Annex J (normative) Hook rung and ladder integrity test: for tip-loaded hooks (destructive)</b> .....	<b>30</b>
<b>Annex K (normative) Hook rung and ladder integrity test: for mid-loaded hooks (destructive)</b> .....	<b>31</b>
<b>Annex L (normative) Foot side strength test: ground standing ladders (destructive)</b> .....	<b>32</b>
<b>Annex M (informative) Recommendations for test frequency, repair, servicing and design considerations</b> .....	<b>33</b>
<b>M.1 Inspection and maintenance</b> .....	<b>33</b>
<b>M.2 Non-destructive test schedule</b> .....	<b>33</b>
<b>M.3 Design</b> .....	<b>34</b>
<b>Annex N (informative) Information and recommendations for user safety</b> .....	<b>35</b>
<b>Annex O (informative) A-deviations</b> .....	<b>36</b>
<b>Bibliography</b> .....	<b>37</b>